WHAT'S THE OUTLOOK FOR LEMON OIL?

Oil, Paint and Drug Reporter

THE CHEMICAL MARKET NEWSPAPER

August 15, 1960

OPD SPECIAL 'DEPTH' REPORT PAGE FIVE

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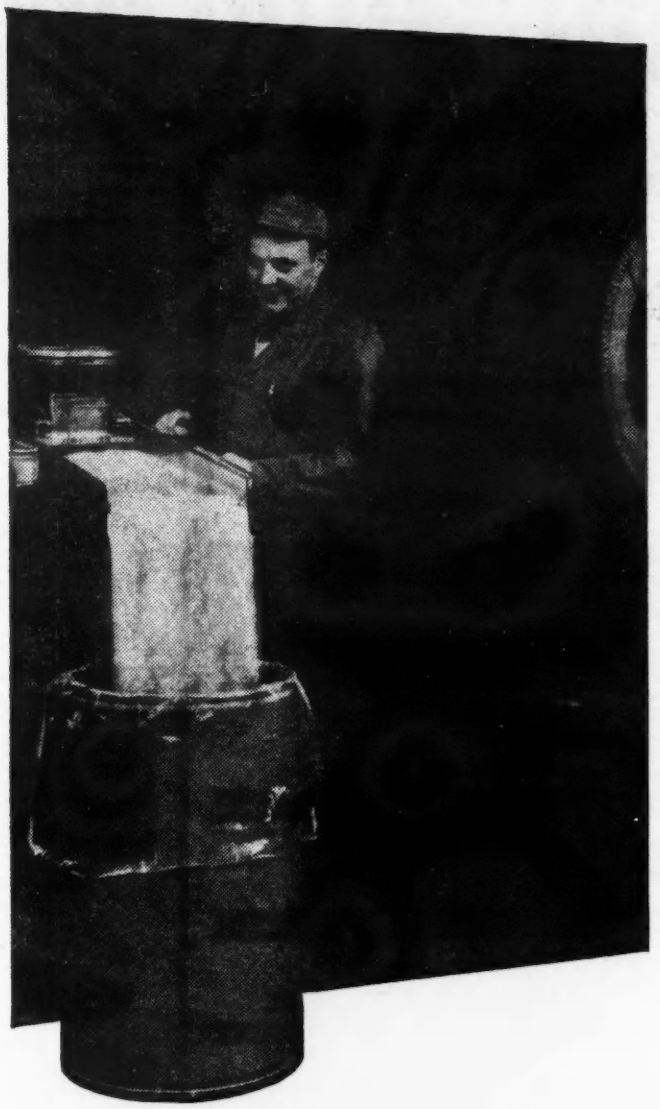

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Oil, Paint and Drug Reporter

Vol. 178 No. 7 30 Church St., New York 7, N. Y.

TO RUN GRACE CHEMICAL UNITS: Osgood V. Tracy, former president of the Esso Standard Division of Humble Oil & Refining Company, who has been elected an executive vice-president and a director of W. R. Grace & Co., New York, effective September 1. He will head Grace's eight chemical divisions and succeeds the late Marlin G. Geiger in that post.

Sunray Going All-Out For Chemical Business

Sunray Mid-Continent Oil Company, which has been inching into the petrochemical field in recent months (its last-revealed venture: a 60-million-pound-a-year styrene monomer plant), is now going to go all the way.

The Tulsa, Okla., oil refiner plans to set up a wholly-owned petrochemical subsidiary—Sunray Chemical Company—to get into "all phases of the chemical and petrochemical business where there is a reasonable expectation for future growth and profit."

Already a producer of such petrochemicals as tetramer, benzene, toluene, xylene and orthoxylene, Sunray hopes to get into these others: polyethylene, polypropylene, petroleum naphthalene, polystyrene and carbon black.

Besides the styrene plant, due to start up at Corpus Christi, Tex., in the spring of 1962, the company expects to complete a benzene extraction plant at Tulsa in October.

In addition, it is also putting up a hydrodealkylation unit at Corpus Christi. Designed to produce benzene, it can also turn out petroleum naphthalene, if need be.

President of the new Sunray Chemical will be Glenn E. Wynn, who will resign as president of Suntide Refining Company, Corpus Christi, also a Sunray subsidiary.

The Sunray management makes it clear that it is placing no limits on the petrochemical activity of the new company and that the big plunge into chemicals is in line with its long-range plans.

Delhi's Orthoxylene Plant Goes on Stream in Texas

Delhi-Taylor Oil Corporation says that its new 70-million-pound-a-year orthoxylene plant at Corpus Christi, Tex., is now on stream.

The new plant was completed in record time. The engineering survey was begun in January on this year and the unit processed material of June 15, less than six months from inception to operation.

Delhi-Taylor will separate orthoxylene in the new facility from a high-purity mixed xylene stream extracted from its "Platformer-Udex" unit.

Besides o-xylene, the new facility is designed to permit a great number of other chemicals to be produced from Delhi's diversified petroleum feedstocks.

Drug Men Claim They Know Exactly the Thing FDA Needs: More Money, Not More Power

What Food & Drug Administration needs more than new policing powers is additional money to enforce the authority it already has. And so, say the nation's drug manufacturers, Secretary of Health, Education & Welfare Arthur C. Flemming and Sen. Estes Kefauver of Tennessee are simply looking in the wrong direction when they propose legislation to broaden FDA's authority. That, add the drug men, is their considered view after studying the control bills pending in the senate and the rules proposed last month by FDA for regulating new drugs.

In Question: Kefauver, Flemming Bills

The control bills in question are those introduced just before the recess for the political conventions last month. One was offered by Sen. Kefauver (S 3677) for licensing ethical drug production. The other was introduced for Secretary Flemming by Sen. Lister Hill of Alabama (S 3815) to step up factory inspection of all drug manufacture and broaden the antibiotics certification system.

The two bills are before Mr. Hill's committee, the senate labor and public welfare commitee, but it is doubtful whether anything will be done with them in this post-convention bobtail congressional session.

While there is a remote possibility that hearings might be held on them, this is but a slim chance in view of other more pressing matters before the committee and on the Democratic agenda for the session: wage-hour legislation and a change in the labor law on situs picketing.

The position of the drug manufacturers on the two legislative proposals won't be solidified until the board of directors of the Pharmaceutical Manufacturers Association considers the matter at a meeting scheduled for October 14.

At the present time both bills are under active study by subcommittees of the PMA law section headed by John Worley. These subcommittees plan to meet on the legislation early in September and report

—Continued on page 53

FDA Cracks Big Whip On Whipped Shortening

Food & Drug Administration has cracked the whip on a new type of vegetable shortening containing nitrogen gas being test-marketed by Lever Brothers Company, New York.

The agency charged the product with being both adulterated and misbranded.

Nitrogen gas is introduced into the shortening through a whipping action during manufacture, which adds bulk without weight to the final product.

FDA said the resulting product contained about 22 percent nitrogen by volume, and, when packed in regular one-pound cans, contained about fourteen ounces of shortening, while the regular three-pound can contained about two pounds, ten ounces of shortening.

The sales pitch made for the product was that it "contained 226 fewer calories per cup" than other shortenings and that

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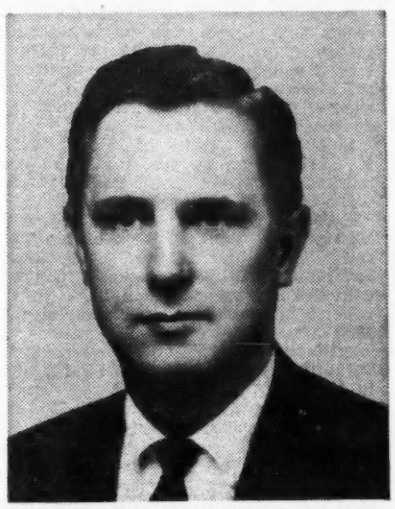

GENERAL SALES MANAGER: H. W. Bajak, appointed general sales manager of Arizona Chemical Company, New York. Arizona is jointly owned by American Cyanamid Company and International Paper Company.

Polyethylene Looms Big in Dow's Thinking

Dow Chemical Company has some big things in mind for polyethylene: construction of a plant to make the plastic in Japan and the building of a unit to produce polyethylene foam in Ohio.

A Dow-associated company, Asahi-Dow, Ltd., has just placed before the government of Japan a proposal for the construction of a plastic installation at Kawasaki.

Meanwhile, in this country, Dow reports that this autumn it plans to start construction of a unit to produce polyethylene foam at the company's Hanging Rock plant at Ironton, Ohio.

Headquarters of the Midland, Mich.,

—Continued on page 41

Chemetron Corp. Buys A Pharmaceuticals Firm

Chemetron Corporation, Chicago, has purchased Specific Pharmaceuticals, Inc., a New York producer of bulk pharmaceuticals.

A maker of bulk pharmaceuticals and a custom manufacturer of synthetic organic chemicals at its Bayonne, N. J., plant, Specific is reported to have done $1 million worth of business in 1959.

Chemetron, which will absorb the acquired company within its chemical products division, declined to disclose the amount of cash paid for Specific's stock.

Fiber Men View High Tariff Wall As Only Defense

The man-made fiber industry—with its $2.5 billion of investments—sees itself at the mercy of the rest of the world if the US bargains away the industry's tariff protection at the forthcoming Geneva negotiations under the General Agreement on Tariffs & Trade (GATT).

The industry fears that every nation producing man-made fibers would unload its surplus in the United States and put the American industry into liquidation.

These warnings were sounded last week in Washington before the US Tariff Commission and the Committee for Reciprocity Information during hearings on the product list scheduled for negotiation at the GATT conferences.

The appeal for no reductions in American tariffs on these products was made by Matthew H. O'Brien, president of Man-Made Fiber Producers Association, which is composed of nearly all the chemical companies in this business, and by Eugene L. Stewart, Washington counsel for the association.

US Has 22 Percent Excess Capacity

Mr. O'Brien said that while this country has 29 percent of the world's productive capacity, it also has 22 percent of the world's excess capacity.

He emphasized that the US now imports nearly 25 percent of the aggregate imports of the world's fiber producing countries, a larger share than any other fiber producing country.

It exports only slightly more than 9 percent of the world's exports of these fibers. At this time, over 21 percent of the US capacity is idle, he added.

"The combined excess capacity of the European Economic Community (Common Market), the European Free Trade Association (Outer Seven) and Japan is equivalent to 61.9 percent of the US productive capacity," he said, "and if this combined excess capacity were used for the production of fibers to increase present exports to the US, the idle US capacity would be increased to 83.1 percent and the industry put in liquidation."

Mr. Stewart emphasized that present rates of duty are no bar to importation of man-made fibers into this country and added that the US is the "market in which every producing nation expects to dispose of its surplus, a condition which would be intensified by further reduction in rates of duty on man-made fibers."

Peak production of 325 million pounds of rayon filament yarn was reached in the US in 1951 and fell to 176 million pounds in 1959, he said. Meanwhile, he continued, Japanese capacity for this yarn increased 90 percent from 1955 to 1959 and continues upward while the US trend is still downward.

Barite Processing Unit Now Under Contruction

International Minerals & Chemical Corporation is constructing a $500,000 barite processing plant in Houston, Tex.

The highly-automated plant will be in operation by mid-November. It will grind and bag barite, a material used in the manufacture of drilling muds for the oil industry, primarily serving the major market of southern Texas and southern Louisiana.

Barite ore will be acquired domestically from Missouri and imported from Mexico, Peru and the Mediterranean area.

Cyanamid Sees Formosa As Good Investment Risk

American Cyanamid Company has faith in the future of Formosa.

The New York-based chemical company has just put up 55 percent of the initial investment in a concern that will manufacture pharmaceuticals and animal feed supplements on the island (Taiwan) stronghold of Free China.

Taiwan Sugar Corporation is the other partner in the $1 million corporation. Manufacturing operations will be conducted at Hsin-Chu, approximately fifty miles southwest of Taipei.

Insecticide Milestone: Arsenic Acid Okayed for Cotton

The insecticide industry has gotten over a big hump with the Food & Drug Administration in connection with enforcement of the new laws controlling pesticide residues and food additives: FDA has just agreed to permit continued use of arsenic acid as a defoliant and desiccant on cotton until March 6, while more studies are made of the possible hazards involved.

This question has been before the agency since shortly before the food additives law became fully effective last March 6. It came up as a result of the passage of the amendment to the Miller pesticide law that last year took nematocides, defoliants, desiccants and growth regulating chemicals out of the gray area of control and placed them under the Miller law.

One of the things that made the question of granting an extension date a little more difficult in this case was the influence of the Delaney clause of the food additives law.

Arsenicals are among the compounds that have been barred by the Delaney clause in the administration of the food additives law.

While the Miller law contains no comparable ban on cancer-producing chemicals, FDA would be compelled to prohibit the use of arsenic acid in the production of cotton if there was any evidence of the chemical showing up in the food products of animals that might feed on the cottonseed meal or the cottonseed oil.

Tests that have been run by industry have convinced the scientists in the FDA that no traces of the arsenic have yet been discovered in either the meat or the milk of dairy cows that have been fed cottonseed meal made from cotton on which arsenic acid has been used.

Additional tests are being made to develop more evidence needed to support a

—Continued on page 49

Plastics Output Up Remarkably; Farm Chemicals Show Nice Gain

US production of plastics and farm chemicals were both up last year—the former rising remarkably and the latter showing a very respectable gain. Such are the gleanings from the latest reports out of the Tariff Commission. Output of all plastics and resin materials (except cellulosics) amounted to 5.860 billion pounds in 1959, about 30 percent more than the production of 4.518 billion pounds in '58. Some 585 million pounds of pesticides and other organic agricultural chemicals were turned out last year. This is about 9 percent more than the 539 million pounds reported for 1958.

Plastics sales last year amounted to 5.166 billion pounds, valued at $1.639 billion, compared with 4.057 billion pounds, valued at $1,275 billion, in 1958. Production of all cellulosic plastics in 1959 amounted to 158 million pounds.

Agricultural chemical sales last year totaled 502 million pounds, valued at $225 million, compared with 467 million pounds, valued at $196 million, in 1958.

Largest-Volume Plastics

In 1959, vinyl and vinyl copolymer resins and polyethylene resins were the groups of plastics materials produced in largest volume. The output of vinyl resins in 1959 amounted to 1.166 billion pounds, compared with 869 million pounds produced in 1958.

Sales of vinyl resins in 1959 amounted to 1.102 billion pounds, valued at $340 million, compared with 829 million pounds, valued at $266 million, in 1958.

Production of polyethylene resins in 1959 slightly exceeded that of the vinyl resins. The output of polyethylene resins in 1959 was 1.195 billion pounds, compared with 865 million pounds in 1958.

Total sales of polyethylene resins in 1959 amounted to 1.116 billion pounds, valued at $355 million, compared with 845 million pounds, valued at $270 million, in 1958.

Production of styrene resins in 1959 was 977 million pounds, compared with 763

—Continued on page 40

Allied Installs Facilities For Electronics Trade

Allied Chemical Corporation has just completed work on production and packaging facilities for what it calls the west coast's first major source of electronic chemicals.

Located at the El Segundo (Calif.) Works of the corporation's General Chemical Division, the new facilities were installed primarily to meet the surrounding area's large concentration of electronics firms.

Penick Expands Unit For Antibiotic Output

S. B. Penick & Co. has just completed expansion and refinement work at its antibiotic fermentation and purification facilities in Newark, N.J.—in a two-and-one-half-year project that cost the company $1,250,000.

The facilities are now in use, producing the standard line of Penick antibiotics: bacitracin, neomycin, gramicidin and tyrothricin. The company also reports that the facilities will be available for confidential fermentation work for its pharmaceutical manufacturing customers.

More flexibility, a better quality product and improved classification are some of the advantages reportedly accruing to the company through the new facilities.

Bio-synthesis will be possible for Penick for the first time through use of new equipment. Faster processing will be another plus factor, officials of the company report.

Orthoxylene Plant Contract Is Awarded by Cities Service

Cities Service Refining Corporation has awarded a contract for the engineering, procurement and construction of its 120-million-pound-a-year orthoxylene plant at Lake Charles, La., to Badger Manufacturing Company of Cambridge, Mass.

Besides orthoxylene, the new facility will produce a raffinate stream which can be used as a low luminosity jet fuel blending stock and an aromatic concentrate which could serve as charge stock for the production of other xylene isomers and toluene.

Int'l Flavors Planning Big Expansion Program

The flavor division of International Flavors & Fragrances, Inc., is planning a program of expansion and consolidation of activities at its Teterboro, N. J., plant. This program, which is projected on a three-year basis, will not only substantially increase production capacity and research facilities but will lead to the consolidation of all the company's US flavor activities at this location.

Presently, the headquarters of the domestic flavor division are at Elizabeth, N. J., where limited space has necessitated a transfer to Teterboro.

The program, in its initial stages, includes increases in production capacity in the IFF line, an additional spray-dry unit, and enlarged service facilities and power plant.

Further expansion of the Teterboro facility will get under way shortly after the present construction program is completed. At that time the company plans the addition of a flavor division administration building and a research center.

The Week's Price Changes

Cocoa Butter, Copra, Dillweed and Cottonseed Oils Advanced. Soybean Meal, Fishmeal and Scrap, Tankage, Tung Oil Reduced.

Prices Advanced

Cocoa butter, 1c. per lb. (p. 59).
Coconut oil, crude, ¾c. per lb. (p. 59).
Copra, $1.50 per ton (p. 59).
Corn oil, crude, ¼c. per lb. (p. 59).
Refd., ¼c. per lb. (p. 59).
Cottonseed oil, crude, ½c. per lb. (p. 59).
Refd., ½c. per lb. (p. 59).
Dillweed oil, 50c. per lb. (p. 55).
Grease, choice white, ¾c. per lb. (p. 59).
Olive oil, 5c. per gal. (p. 59).
Peanut oil, crude, ½c. per lb. (p. 59).
Refd., ½c. per lb. (p. 59).
Soybean oil, crude, ½c. per lb. (p. 59).
Refd., ½c. per lb. (p. 59).

Prices Reduced

Fishscrap, meal, $7 per ton (p. 44).
Soybean meal, $2.50 per ton (p. 59).
Tung oil, ½c. per lb. (p. 59).
Tankage, 50c. per unit-ton (p. 44).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

August 12, 1960	August 5, 1960	August 14, 1959
109.72	109.87	109.42

Pesticides Have Big Job Ahead

If there were any doubts that pesticide chemical producers have a man-sized job ahead of them in protecting the nation's food supply, consider these new facts and figures just out of the Department of Agriculture: Insect pests that chew, suck, bite and bore away at our food and feed crops and livestock inflict losses of some $3 billion a year. Bacteria, viruses, fungi, nematodes and weeds destroy another $7 billion worth of food production.

Pinpointing these gargantuan figures, USDA comes up with these sobering estimates and observations:

USDA's Estimates and Observations

- Grasshopper outbreaks in the United States have piled up crop damage estimated at $315 million during 1934-1938. Since 1942, chemical-control measures have saved an estimated $35 million worth of crops annually from this past.
- Tomato fruitworms can take a $15 million bite out of the south's annual tomato harvest. Losses can be equally heavy in the north in seasons favorable to the insect. By using insecticides, says USDA, growers can cut losses 90 percent or more.
- European corn borer destroyed an estimated $72 million worth of US corn last year.
- Chemical weeding saves spinach farmers in Mississippi as much as $162 an acre. Cost of hand weeding would price

—Continued on page 49

Union Carbide Reduces Low-Density Polyethylene

Union Carbide Plastics Company, a division of Union Carbide Corporation, has reduced its prices on low-density polyethylene. Reductions range up to 5 cents a pound and apply to practically all types of "Bakelite" brand low-density polyethylene resins and compounds made therefrom.

The action was taken as part of the New York company's long-range marketing plan to broaden the use of polyethylene. Since 1943, the price of polyethylene resin has been reduced over 70 percent, while at the same time the physical qualities and performance are said to have been materially improved.

IN MARKET RESEARCH POST: R. H. Wecker, formerly with Spencer Chemical Company, who has joined Wyandotte Chemicals Corporation, Wyandotte, Mich., as assistant director of marketing research.

Rexall's Division Starts Making Polyethylene Film

Santa Ana Film, a division of Rexall Drug & Chemical Company, Los Angeles, has commenced production of a wide range of polyethylene film for agricultural, industrial and general uses.

The film firm is located in Santa Ana, Calif., and is one of several Rexall plastic operations located at the new installation there.

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LEMON OIL: THE PRODUCERS

California Turned Out 1,750,000 Pounds in '59

Producer	Location
California Citrus Processors	Anaheim, Calif.
Holly-Pak, Inc.	Hollywood, Calif.
Minute Maid Corporation	Fullerton, Calif.
Mutual Citrus Products Company	Anaheim, Calif.
Paramount Citrus Association, Inc.	San Fernando, Calif.
Sunkist Growers	Ontario, Calif.
Ventura Processors	Ventura, Calif.

Lemon Oil Outlook Is Gloomy, But Situation Far From Hopeless As New Uses Are Investigated

For some time now, the prophets of gloom have enjoyed dripping their crying towels over the lemon oil industry. They take morbid delight in stressing that in February the price of top-grade California oil was slashed almost 50 percent. In May, they continue, there were reports of some 77,000 carloads of lemons in storage. And today, they point out, growers estimate that peak yearly output won't be reached for another two or three years.

OPD 'Depth' Report

Despite all this, the outlook is not nearly so glum as it appears to be at first glance. For one thing, suppliers report stepped-up lemon oil sales to users who, heretofore, have relied on the synthetic oil.

Some Synthetic Oil Sales Stopped

With natural oil prices in the neighborhood of $1.25 to $1.50 a pound, a number of manufacturers have stopped buying the synthetic flavors even though the bulk of them sell for under $1 a pound.

One West Coast company representative, in fact, states flatly that the price reduction in natural, coupled with the increase in sales, has "more than used up the slack."

The price reduction in natural undoubtedly lured many customers away from the synthetics. Interviews with several synthetic lemon oil manufacturers indicate that synthetic sales have fallen off anywhere from 20 to 50 percent.

Whether this has cut down the surplus in natural oil to size is a moot point. One key statistic is the stumbling block: Industry executives are generally agreed that during a normal year less than 10 percent of the total volume of lemon oil sold is synthetic.

Technical men explain that the fresh fruit is not stored. Briefly, this is how the material is handled:

A grower takes his lemons into the packing house. There, the manager decides how much is to be put on the fresh fruit market and how much is to be processed.

Returns are higher for the fresh fruit, so the manager allocates as much of the material to that market as is possible — keeping in mind the demand and the price.

What he cannot sell as fresh fruit, he processes. When demand does not exist for processed material — which consists primarily of juice, pectin and oil — the material is processed anyway and stored.

What does an inventory of 77,000 carloads of lemons mean? Well, by very

—Continued on page 9

LEMON OIL PRICES

		High	Low
1960*	lb.	$3.50	$1.25
1959	lb.	3.25	2.70
1958	lb.	4.00	3.00
1957	lb.	4.25	3.00
1956	lb.	6.00	4.05
1955	lb.	6.00	4.50
1954	lb.	7.25	4.90
1953	lb.	7.25	5.65
1952	lb.	6.00	4.50

*Seven Months

Source: OPD's 1960 Hi-Lo Chemical Price Issue

OPD Reports From Europe

Penicillin for Combating Staph Ready to Make Debut in Britain

A synthetic penicillin tailored to combat resistant staphylococcus germs, which have became a serious hospital problem around the world, is expected to be introduced on the British market next month. Developer of the new drug is Beecham Research Laboratories, a part of the Beecham Group, Ltd. The new penicillin will be the second one introduced by Beecham since its discovery of a method to produce varieties of penicillin by adding side-chains to the core penicillin molecule. In the US, these so-called synthetic penicillins are produced and sold by Bristol Laboratories, which has an agreement with Beecham. Chas. Pfizer & Co. also has a synthetic penicillin.

SPECIAL PRODUCTS CHIEF: Ralph P. Gates, named director of special products for the Victor Chemical Division of Stauffer Chemical Company, Chicago.

Beecham is not comenting officially on the reports circulating in medical publications that its latest drug will attack the staphylococcus problem, one of the major problems in medicine today, but . . .

Scientific Journals to Break News

The company does state that scientific medical journals in September will carry the first reports of a new antibiotic "which promises to make a dramatic contribution to medicine." The company follows a policy of releasing drug information first in medical journals.

The new antibiotic will be administered by injection at first, but work already has started in Beecham laboratories to develop a form of the penicillin which can be administered orally. "Broxil," the first of Beecham's synthetic penicillins, was introduced last October, and the company reports sales are increasing satisfactorily. "Broxil" can be administered orally.

Beecham is selling its new antibiotics in the United Kingdom and Canada now, and licensing agreements for manufacture and sale of the new penicillins in other countries are now being concluded, the company reports.

H. G. Lazell, chairman of Beecham, has indicated that the company expects these licensing arrangements to "yield substan-

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Corrosion Controller Is Licensed by Conoco

Minneapolis - Honeywell Regulator Company, Minneapolis, Minn., is going to manufacture and market the electrochemical system for controlling corrosion that has been developed by Continental Oil Company, Houston, Tex.

In revealing the licensing last weekend, Continental Oil explained that its system will be offered initially for the control of corrosion in the storage and processing of sulfuric and certain other corrosive acids, as well as corrosive caustics.

Known as the "Anatrol" system, it finds

—Continued on page 42

Bzura Producing Citric

Bzura Chemical Company reports that it is now producing commercial quantities of USP citric acid at its plant in Keyport, N. J. With the start-up of large-volume operations at the new facility, Bzura now lays claim to being the second largest producer of citric acid in the US.

Air Reduction Spending $1 Million On Expansion

Air Reduction Pacific Company will spend $1 million on expansion of its new air separation plant at Richmond, Calif.

The expansion program will boost the rated capacity of the installation to more than sixty-five tons per day of high purity liquid oxygen, nitrogen and argon. The air separation plant, which Air Reduction Pacific opened in March, will be expanded to increase production by 20 percent and a second unit will be constructed to serve the rapidly growing industrial needs of the San Francisco Bay area.

The new unit will produce thirty-two tons a day of liquid oxygen, nitrogen and argon. Completion is scheduled for early 1961.

Reichhold Flies Home; Europe Was Just Fine

Henry Reichhold, who does about 30,000 air miles a month as president and general manager of Reichhold Chemicals, Inc., White Plains, has just returned from Europe with the news that the chemical industry is booming on the continent. And, Mr. Reichhold should know, for . . .

Here are some of the things he did while overseas:

- Completed the purchase of a large tract of land in 's-Hertogenbosch, Holland, on which will be built a chemical plant similar to other Reichhold units in Europe. The plant will be operated by the newly-formed Reichhold-Holland, which will also handle all Reichhold imports from the US to the European Common Market.
- Concluded plans in Munich, Germany, for the manufacture of vinyl acetate monomer under a license agreement signed by Wacker Chemie G.M.B.H., of Munich, and Reichhold. Production of the chemical will be handled by a new plant in Houston, Tex., which will have

—Continued on page 43

WITCO SUBSIDIARY V. P.: William A. Thorne, elected vice-president and director of Tar Distilling Company and Old Colony Tar Company. Both are wholly-owned subsidiaries of Witco Chemical Company, New York.

Alcohol Innocent Enough, But Oh! Those Congeners

Taking a close look into the cup that cheers, the chemist points out that it isn't the alcohol content that produces those cheerless mornings-after but, instead, a group of substances known as congeners.

These include fusel oil, esters, acetaldehyde, furfural and tannins.

Though this news hasn't yet reached the layman, who still swears off "alcohol" when in the grip of a hangover, the fact is known to scientists.

In fact, two New York City chemists have gone into a clinical study involving sixty-eight moderate social drinkers to determine the comparative effects of whisky, which contains more congeners than any other alcoholic beverage, and vodka, which is camparatively free of them.

Mild hangovers were found to be common after consumption of as little as two ounces of whisky. But such hangovers never appeared when the same subjects were given comparable quantities of alcohol in the form of vodka.

Thus the popular belief that the Russian beverage is altogether easier on the nerves, stomach and eyeballs now has scientific confirmation.

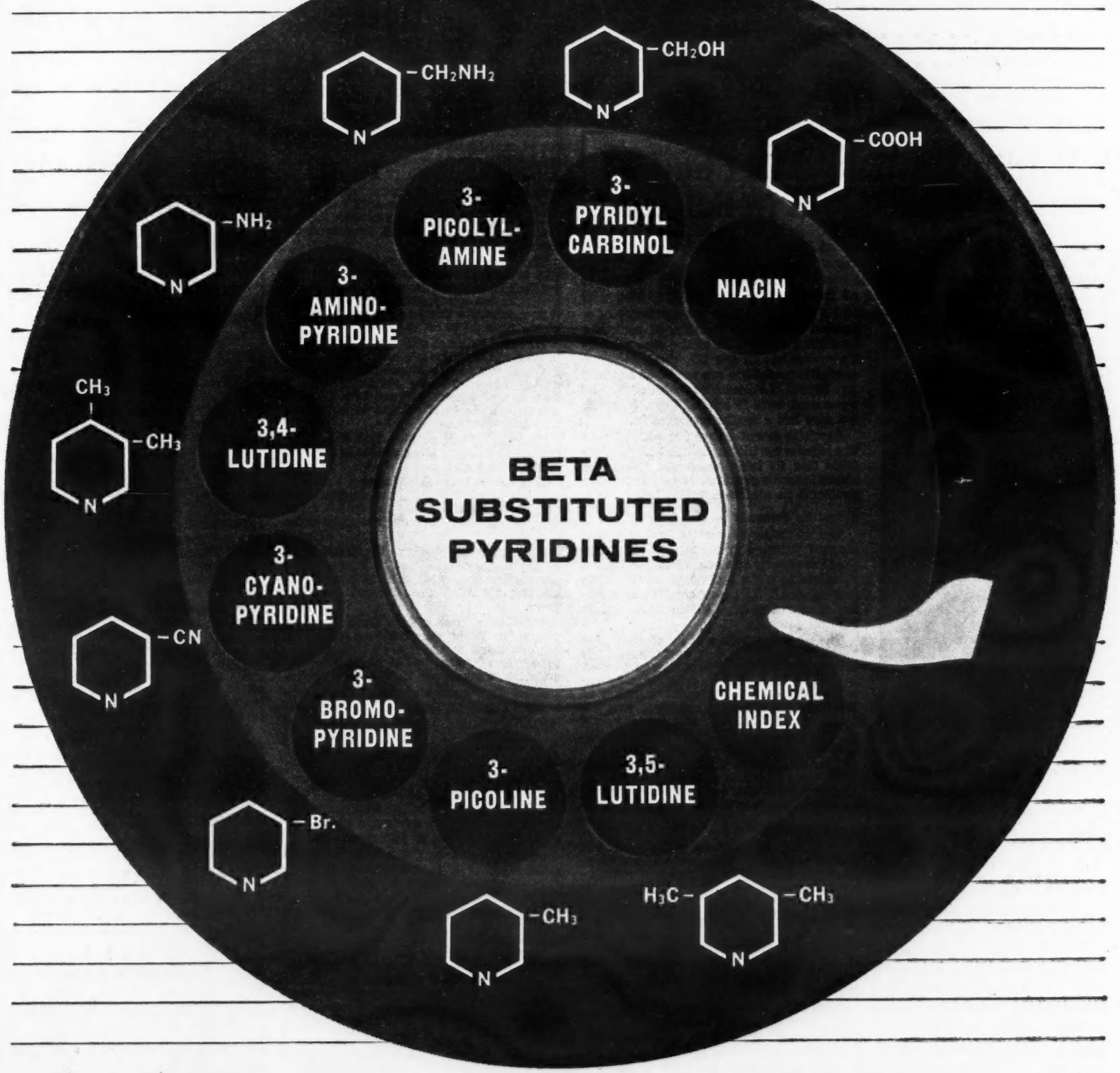
The experiments were conducted by F. Damrau and E. Liddy and are reported in the July issue of the *Journal* of the National Medical Association.

Turning to another drink, it has now been determined that if the chemicals in whisky are almost literally a pain in the neck, those found in another cup that cheers—coffee—are now known to be the secret of its delectable aroma.

Suppose someone who is a little para-

—Continued on page 39

call Reilly.



Reilly CHEMICALS

REILLY TAR & CHEMICAL CORPORATION

MERCHANTS BANK BUILDING, INDIANAPOLIS 4, INDIANA

SALES OFFICES IN PRINCIPAL CITIES

ANTIFREEZE SALES MANAGER: Paul R. Smith, a veteran of twenty-four years in automotive chemical sales with Commercial Solvents Corporation, who has joined Houston Chemical Corporation, New York, as manager of antifreeze sales.

Nutrients Are in Line For GRAS Clearance

Food & Drug Administration says its plans to give GRAS ("generally recognized as safe") clearance to a batch of thirty-five or more dietary food supplements. In other food additives actions, the agency has:

- Granted time extensions — until March 6, 1961—to two batches of direct food additives.
- Allowed more time for two groups of indirect food additives used in food packaging.
- Cleared calcium disodium ethylenediaminetetraceate as safe for use in certain foods.
- Granted a time extension — until March 6—to sellers of magnesium chlorate for use on sorghum as a desiccant and defoliant.

The calcium salt was cleared for use as a preservative in sandwich spread, nonstandardized dressings and sauces, and as an anti-gushing ingredient in fermented malt beverages under certain prescribed conditions.

For labels, the agency also okayed the use of the proposed common name calcium disodium EDTA, followed by the chemical name in parenthesis.

The chlorate action, taken to permit the gathering of adequate scientific information on the safety of the chemical under the food additives law, grows out of FDA's discretionary authority in public law

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Armstrong Has Urethanes

Armstrong Cork Company, Lancaster, Pa., is introducing a new family of solid urethanes that can be compounded to customer specifications in roll, sheet, tube, rod and cast parts for a variety of industrial applications.

India Has New Five-Year Plan And Country's Chemical People See It as an Industry Booster

The government of India has before it another Five-Year Economic Development Plan, and according to reports coming out of the country there will be a big place for the nation's burgeoning chemical industry to function under the setup. Chemicals are among those products that seem likely to have plenty of encouragement as the country moves to attain an economic level that US Ambassador Ellsworth Bunker has told the Indian people is an "attainable goal."

Touching on the outlook for chemicals, the country's Information Service has just released a report in which it notes that the government has granted a license to Manubhai Industries Private, Ltd., and Von Kohorn International Corporation of New York, for the construction of a caprolactam plant and expansion of Bombay nylon producing facilities.

Caprolactam Unit Ready This Year

Construction of the caprolactam unit, estimated to cost the equivalent of $3.15 million, will be completed this year. Annual operating capacity is scheduled at 10 million pounds.

In Kalyan, plans are under way to establish a plant for the manufacture of oxalic and formic acids. West German money is said to be backing up an Indian firm in the establishment of the facility.

The government, in line with its policy of encouraging industrialization in South India, has granted a license to the private firm, Madras Aluminium, Ltd., for a plant at Mettur in Salem, to manufacture aluminum ingots, slabs and alloys. The Montecatini interests from Italy will install machinery capable of producing 10,000 metric tons of ingots a year.

In the second half of next year a streptomycin plant, owned by Hindustan Antibiotics, will go into operation. Financed out of company resources, it will be worth the equivalent of $3.57 million. The company reportedly has other things in mind, including a plant for the production of vitamin C.

Past operations of Hindustan Antibiotics netted a saving equivalent to $4.2 million in foreign exchange, with production of finished penicillin rising 14 percent over 1958 to 33 million mega units. With the completion of its drug projects, the com-

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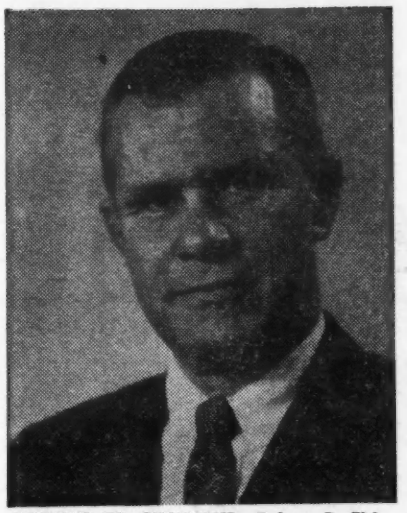
Flavorings—27 of Them—Slated for Food Use Okay

A list of twenty-seven flavoring substances are proposed to be recognized as safe for their intended use by the Food & Drug Administration. Interested persons have been given thirty days to comment on the list. The twenty-seven items are:

Acetaldehyde (ethanol); acetoin (acetyl methylcarbinol); aconitic acid (equisetic acid, citridic acid, achilleic acid); anethole (parapropenyl anisole); benzaldehyde (benzoic aldehyde); brominated vegetable oils and n-butyric acid (butanoic acid);

Also, d-or l-carvone (carvol); cinnamaldehyde (cinnamic aldehyde); citral (2,6-dimethyloctadien-2,6-al-8, geraniol, neral); decanal (N-decylaldehyde, capraldehyde, caprie aldehyde, caprinalde-

—*Continued on page 67*



RETURNS TO CYANAMID: Robert B. Fiske, on leave of absence with the North American Treaty Organization in Paris, has returned to American Cyanamid Company, New York, as a vice-president and member of the general staff. He will also serve as chairman of Cyanamid's patent committee.

Bank Sees the Future Abrim With Chemicals

Some of tomorrow's prospects in the chemical world include products to control animal and plant heredity and behavior, synthetically produced foods, chemical fuel cells for electricity and, finally, plastic coatings to replace grease and oil. That's the opinion of one of the trade's admiring and influential friends in the world of finance.

"The chemical industry is the dynamic giant of American industry—the fourth largest by assets and the fifth by sales," says Chase Manhattan Bank in the current issue of its bimonthly review, *Business in Brief*.

Since 1947, the New York bank reports, chemical and allied production has grown at an annual rate of 8 percent, as compared with only 4 percent for total industrial production. Sales, now at an annual total of $27 billion, have doubled since 1947.

What has made the chemical industry grow so fast? What part has research and

—*Continued on page 52*

Chemical Exports: Poor 2nd Quarter Hurt a Good Half

Chemical exports during the first six months of this year are ahead of those of the comparable period last year by approximately $20 million—but no thanks to the situation that developed in the second quarter.

Preliminary estimates prepared by the Bureau of Census show that exports for April, May and June ran behind those of the corresponding three months last year and were less than those in the first quarter of this year.

Imports on the other hand, are up in all comparisons. They were higher for the first six months of this year than for the comparable period last year; the second quarter imports were over those of the second quarter for last year, and were over those of the first quarter of this year.

Comparison of Six-Month Periods

Exports for the first six months of this year totaled $746.4 million as compared with $726.3 million for the same period last year. The import total for the six-month period was $190.2 million this year and $171.2 million last year.

Second quarter exports amounted to $346.6 million as against $371.5 million last year, while second quarter imports totaled $97.8 million as compared with $89.8 million.

For the month of June alone, exports of chemicals rose slightly to $143.1 million from the May total of $142.7 million and exceeded those of June last year by $11.8 million. Comparable import figures were $30 million in June, $33.5 million in May, and $29.7 million in June, 1959.

Exports of all merchandise during the first six months of this year have amounted to $10,223.1 million, an increase of 19 percent over last year. During the second quarter alone, exports totaled $5,334 million, an increase of about 20 percent over the second quarter last year.

During the month of June alone, exports of all merchandise totaled $1,719.6 million, a decrease of about 4 percent from the May total of $1,791.6 million, but 21 percent over the June, 1959 total of $1,422.5 million.

The six months import trade amounted to $7,630.4 million, a level about 3 percent

—*Continued on page 35*

Nylon Tire Yarn Is Cut For Third Time This Year

For the third time this year, nylon tire yarn prices have been reduced. The cuts, ranging from 2 cents to 5 cents a pound, were initiated by E. I. duPont de Nemours & Co., Wilmington, Del.

Other big nylon yarn makers—Chemstrand Corporation and Allied Chemical Corporation—went along with the duPont move. The nylon cuts were prompted by recent reductions in "Tyrex" rayon tire yarn, a competitive material.

Association Meetings

American Association of Textile Chemists & Colorists, national convention, Sheraton hotel, Philadelphia, October 6-8.

American Chemical Society, national meeting, New York, September 11-16.

American Council of Independent Laboratories, annual meeting, Deauville hotel, Miami Beach, Fla., October 11-15.

American Institute of Chemical Engineers, May hotel, Tulsa, Okla., September 25-28.

American Oil Chemists' Society, fall meeting, New Yorker hotel, New York, October 17-19.

American Pharmaceutical Association, annual meeting, Shoreham hotel, Washington, D. C., August 14-20.

American Soybean Association, joint annual meeting with National Soybean Processors Association, Peabody hotel, Memphis, Tenn., August 22-23.

American Tung Oil Association, annual convention, Edgewater Gulf hotel, Edgewater Park, Miss., September 28-29.

Armed Forces Chemical Association, annual meeting, Sheraton-Park hotel, Washington, D. C., September 15-16.

Association of Consulting Chemists & Chemical Engineers, annual meeting, Shelburne hotel, New York, October 25.

Canadian Agricultural Chemicals Association, annual meeting, Britannia hotel, Lake of Bays, Muskoka, Ontario, September 12-14.

Canadian Manufacturers of Chemical Specialties Association, annual meeting, Queen Elizabeth hotel, Montreal, Que., Canada, October 24-26.

Chemical Institute of Canada, western regional conference, Regina, Sask., September 8-10.

Chemical Market Research Association, Wentworth-by-the-Sea, Portsmouth, N. H., September 22-23; Pittsburgh Hilton hotel, Pittsburgh, Pa., November 9-10.

Drug, Chemical & Allied Trades Association, annual meeting, Sagamore hotel, Bolton Landing, Lake George, N. Y., September 15-18.

Electrochemical Society, Shamrock hotel, Houston, Tex., October 9-13.

Federation of Societies for Paint Technology, annual meeting, Sherman hotel, Chicago, October 31-November 2.

Gordon Research Conferences: medicinal chemistry, Colby Junior College, New London, N. H.; analytical chemistry, New Hampton School, New Hampton, N. H.; toxicology and safety evaluations, Kimball Union Academy, Meriden, N. H., August 15-19.

National Agricultural Chemicals Association, annual meeting, Del Coronado hotel, Coronado, Calif., September 27-29.

National Drug Trade Conference, annual meeting, Gramercy Park hotel, New York, December 16.

National Foreign Trade Council, national meeting, Waldorf-Astoria hotel, New York, November 14-16.

National Paint, Varnish & Lacquer Association, annual convention, Drake hotel, Chicago, October 27-29.

Parenteral Drug Association, annual convention, Statler hotel, New York, October 19-21.

Packaging Institute, annual national packaging forum, Statler-Hilton hotel, New York, October 31-November 2.

Pharmaceutical Manufacturers Association, eastern regional meeting, Waldorf-Astoria hotel, New York, December 12-14.

Salesmen's Association of the American Chemical Industry, annual sales clinic, Roosevelt hotel, New York, November 14.

Society of the Plastics Industry, New England section conference, Wentworth-by-the-Sea, Portsmouth, N. H., October 13-14.

Stanford Research Institute, symposium on chemical reactions in the lower and upper atmosphere, Mark Hopkins hotel, San Francisco, April 18-20, 1961.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, September 13.

Technical Association of the Pulp & Paper Industry, forest biology symposium, New Washington hotel, Seattle, Wash., August 24-27.

Toilet Goods Association, scientific section's winter meeting, Waldorf-Astoria hotel, New York November 30.

Morton . . . symbol of leadership in polymer floor polish development

MORTON LATEX RESEARCH . . . A comprehensive continuing research program in the laboratories of Morton Chemical Company brings you the best in Latex developments. Our understanding of polish formulating problems is your assurance of the latest techniques and developments in polymer polish ingredients.

TECHNICAL SERVICE FOR MANUFACTURERS. . . Analyzing your polymer floor polish and recommending improvements is one of Morton's most important projects. Our technical staff is on call, and on duty . . . in your laboratory or ours . . . until your problem is solved.

OUTSTANDING PERFORMANCE . . . Your goal . . . and ours . . . is to produce a polymer floor polish with the characteristics your customers want. *Morton's RWL Latices* permit you to formulate for high gloss, hardness, durability, leveling, or any other specific properties needed. Ultra-small particle size of less than 0.02 microns, and high stability of *Morton's RWL Latices* give you complete flexibility in developing your formulas.

Your Morton Man can give you complete details on *RWL Latices* and Morton's complete technical service. Your inquiry will receive immediate attention.

CHEMICAL PRODUCTS FROM MORTON

Modified Polystyrene and Acrylic Latices
Magnesium Oxide • Magnesium Carbonate
Bromides—Potassium, Sodium, Ammonium
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Lemon Oil Outlook Gloomy, But Situation Not Hopeless as New Uses Are Explored

OPD 'Depth' Report on Lemon Oil

—*Continued from page 5*

rough mathematical calculation, it translates into the startling fact that around 5,500,000 pounds of lemon oil are in storage.

This assumes a typical carload weight of 75,000 pounds and the average condition that somewhat under 1/100 of the total weight of the processed fruit is oil.

Since the average annual production of lemon oil has been approximately 1,250,000 pounds in recent years, it is difficult to see how more than four years' supply of oil has been sold in a mere six months. Last year, some 1,750,000 pounds of lemon oil are reported to have been sold.

Major Use Breakthrough Needed

What is needed, of course, is a major end-use breakthrough. Says one lemon oil marketer: There is such a surplus of oil that nothing short of a completely new use —one that will consume thousands of pounds of oil—can help the situation.

"What I'm counting on," he says, "is something startling to come out of our work in the laboratories." He feels that so much money is being spent trying to find new uses for the oil that something is bound to be developed.

More specific than this is the work the Sunkist Growers have done to introduce the use of lemon oil to the manufacturers of such products as soups and salad dressings.

Extensive tests in the laboratories have proved that the flavors of these products are enhanced by the addition of lemon oil, but, according to a company representative, the project has met with little financial success.

He explains that even though one large soup manufacturer admits that the addition of minute amounts of lemon oil improves the flavor of soup, the extra cost is not worth it.

Other prospects for utilizing the processed lemons are the frozen fruit punches and fruit bars. These are made primarily of the juice, but some oil is added.

It is reported that the punches, which are the combination of various juices with a lemon juice base, are a more profitable item than lemon juice alone.

Both the punches and the frozen bars are said to be looked upon with optimism.

Another promising factor in the market, according to both the lemon oil industry and the soft drink industry, is the growth in the sales of bottled soda pop.

Growth of the Soda Pop Market

Already the largest user of lemon oil, estimated now at some 57 percent, this market is expected to expand considerably in excess of population growth during the next five years.

According to the soft drink makers, today's soft drink consumption is roughly 200 bottles per capita. By 1965, per capita consumption is calculated to rise to 240 bottles.

Reasons put forth by the industry for the growth of soft drink sales are:

- Population growth which will be some 1.7 percent per year.
- Higher incomes.
- More leisure time.
- More aggressive sales techniques.

More efficient coin-operated machines, greater variety of bottle sizes and more pop sold in cans all are expected to give sales a boost.

In the works is a plastic container for soft drinks. And in the future, possibly, is a small tank that housewives may rent from the supermarket. The bottler fills the tank and the housewife takes it home and stores it in her refrigerator. When she wants a "fountain" drink she just presses a button.

- Increased sales overseas. According to a soft drink company executive, there are franchised bottlers in five continents. The popularity of the American soft drink in the far corners of the world has exceeded the most optimistic speculations of a few years back.

Consumption, of course, is all over the world but bottlers are particularly interested in the consumption below the equator where the seasons are reverse to those above.

More pop is consumed during the warm months, but with a good portion of sales below the equator nowadays, there is not as great a fluctuation in bottlers incomes as there used to be.

The most popular soft drink is still the cola type, which accounts for from 65 to 70 percent of all that is sold. Eleven percent of all soft drinks are either lemon or lime or the lemon-lime combination. However, regardless of the dominant flavor, some lemon oil goes into almost every bottle of pop.

Amount of Flavoring in Soda

The amount of flavoring varies considerably, but it generally ranges between one-half ounce to 4 ounces per gallon of sugar syrup. This makes six gallons of soft drink. The industry estimates it will sell 1.7 billion gallons of pop in 1960.

No particularly spectacular growth is expected in the remaining end-uses. It is generally assumed that these categories will increase at approximately the same rate as the population grows.

As interesting as the above speculations about the future of lemon oil is knowledge of its past.

It is important to keep in mind that lemon oil is merely a by-product of the whole lemon industry. It is a valuable by-product, but decidedly in third place to the juice and the fresh fruit.

At one time, it was generally held by the lemon growers that 60 percent of the crop had to be sold domestically as fresh fruit in order to make ends meet.

This, apparently, was a good rule-of-thumb figure for years, but now the economists are revising their thinking.

They are being forced to because not since the 1952-53 season has that high a percentage of the crop been sold as fresh fruit.

Lemons as Fresh Fruit*

1958-1959	40 percent
1957-1958	42 percent
1956-1957	47 percent
1955-1956	55 percent
1954-1955	55 percent
1953-1954	47 percent
1952-1953	62 percent

* Table shows the percentage of the lemon crop sold domestically as fresh fruit.

As of mid-May, a puny 29 percent of the lemon crop had been sold as fresh fruit.

Industry spokesmen admit that the per capita fresh lemon sales have been gradually declining since the mid-forties. And, of course, they would like to reverse this trend.

Reasons for the slump in fresh fruit sales are many, but undoubtedly in the forefront is the housewife's insistence that the food she brings home from the grocery store already be washed, packed, squeezed, cooked, packaged, etc.

With this in mind, the lemon people are shifting their marketing emphasis. Instead of concentrating on selling 60 percent of the crop as fresh fruit, they are instead trying to reduce the cost of growing lemons and are looking around for more profitable outlets for the processed material. Fruit punches and frozen bars, mentioned above, are examples of this.

Lemon growers are reported to be increasing their advertising budgets substantially in order to expand the market for the processed material. However, this is more easily said than done and the plain fact is that there are some 5.7 billion pounds of lemons in storage.

How did this staggering surplus come about?

Back in 1952-1953 when frozen juices were introduced, demand for lemon juice rose and the price of the fruit went up accordingly.

Lemon Oil Price in 1948

In 1948, the price for the oil handled by the Sunkist Growers, which accounted for over 80 percent of all the lemons grown in California and Arizona, was $2.75 per pound.

Material handled by competing organizations traditionally sells for some 20 percent less than Sunkist material.

In 1949, the price went up to $3 per pound, and by 1950, the price was up to $4.50 per pound. The next year it climbed to $5 per pound and the next to $6.

These prices looked good to the growers, who figured that if they could make a good profit on, say 100 bushels of lemons, they could make twice as good a profit on 200 bushels.

So they began planting lemon trees. Planting new trees began in the early 1950's and was probably at its peak in 1953—the year of the $7.25-per-pound lemon oil price.

It takes from eight to ten years for a lemon tree to bear fully, so the complete impact of this planting is not yet apparent.

Assuming that no disastrous weather conditions hit the California-Arizona growing areas, the 1963 crop ought to be the beginning of the peak production of lemons.

On the basis of industry estimates that the 1960 crop will be some 38,000 carloads, the 1963 crop should be in the neighborhood of 45,000 carloads.

News from published sources indicates that the crop several years hence will be some 20 percent greater than the present one.

In recent weeks, spokesmen from California have been saying that their estimate for the 1960 crop may be too high. One report is that a year ago, when the buds were beginning to form, adverse weather conditions probably had a deleterious effect on them.

The extent of the damage is not yet known, but rough estimates are that the actual carloads produced during 1960 may be several thousand short of the original estimate.

Even if this is true, the problem of over-supply will hardly be altered.

Trend in the California-Arizona producing areas is for the "big-business" grower to supplant the small unit grower. Also, technological advances are said to have upped yield per acre.

Florida Lemon Crop

About Florida lemons. According to the Southern Utilization Research and Development Division of the United States Department of Agriculture in Winter Haven, Fla., there was considerable interest in Florida in planting lemons when the frozen lemon concentrate first came on the market.

"But," according to USDA, "the market soon became saturated with lemon oil . . . Plantings in California seemed adequate to supply the demand.

"One large producer planted some 700 acres in lemons at the height of the interest and others planted a little here and there, but lemon production still is so small in Florida that it isn't included in citrus fruit production figures.

"The only figure located is an estimation of 1,500 acres of 'non-bearing' trees.

"The basic difficulty (besides oversupply) is that lemons grown in Florida are not well suited for shipping fresh because of size, roughness of skin and abnormal shapes. There could be some possibilities in lemon products, however."

An issue which no longer poses a problem for domestic lemon oil producers is

—*Continued on page 56*

LEMON OIL: THE IMPORT-EXPORT PICTURE

Foreign Trade Provides a Statistical Clue to Market

	Terpene	Terpeneless	Terpene and Terpeneless
IMPORTS			**EXPORTS**
1959	81,208 pounds	2,480 pounds	258,677 pounds
1958	58,187 pounds	478 pounds	347,751 pounds
1957	90,300 pounds	762 pounds	295,600 pounds
1956	85,065 pounds	2,902 pounds	177,932 pounds
1955	39,372 pounds	551 pounds	119,120 pounds
1954	106,431 pounds	580 pounds	61,036 pounds
1953	113,104 pounds	573 pounds	150,063 pounds
1952	35,820 pounds	1,405 pounds	4,670 pounds

Source: Bureau of Census

LEMON OIL USES

Soft Drinks	57 percent
Baking	17 percent
Confectionery	15 percent
Extracts	5 percent
Perfume	3 percent
Pharmaceuticals	2 percent
Miscellaneous	1 percent
Total	100 percent

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, August 12 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns. ..... lb. 1.90 - 2.40
Acacia (see Arabic gum).
Acetaldehyde 99%, dms., c.l., works. lb. .12 - —
dms., l.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .32½- —
bbls., bgs., ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP, bbls., 225-lb. dms., any quantity lb. .79 - —
100-lb. dms., any quantity lb. .81 - —
Acetic acid, coml., or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs. 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd. 100 lbs.22.00 -23.00
tech., dms., c.l., dlvd ..... 100 lbs.13.75 - —
dms., l.c.l., dlvd ..... 100 lbs.15.25 - —
tanks, dlvd. ..... 100 lbs.10.00 - —
USP, cbys., dlvd ..... 100 lbs.31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .18 - —
tanks, dlvd. E ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l., dlvd ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.25 - —
fib. dms., l.c.l., dlvd ..... lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l. dlvd ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd ..... lb. .10½- —
dms., l.c.l., dlvd ..... lb. .12 - —
tanks, dlvd. ..... lb. .08 - —
Acetonitrile, dms., c.l., t.l., dlvd lb. .35 - —
dms., l.c.l., dlvd ..... lb. .36½- .37
tanks, dlvd. ..... lb. .32 - —
Acetophenetidin, USP., 200-lb. dms., 1,000 lbs., frt. alld lb. 1.20 - —
100-lb. dms., 1,000 lbs., frt. alld. lb. 1.22 - —
Acetophenone, cns., dms ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .47 - —
dms., l.c.l., works ..... lb. .47¾- —
tanks, works ..... lb. .45 - —
N-Acetyl-p-aminophenol, dms., t.l. (min. 23,000 lbs.), frt. adjusted lb. 1.24 - —
dms., 5,000-lb. lots, same basis lb. 1.30 - 1.45
dms., smaller lots, same basis lb. 1.35 - 1.63
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .20 - —
cs., l.c.l., ex whse ..... lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 - —
Acetylsalicylic acid, USP, cryst. (20, 40 mesh), powd. (60 mesh), 250-lb. dms., c.l., pt. of shipt lb. .56¼- —
USP, 10% starch granulation, 12-50 mesh, white, 250-lb. dms., c.l., same basis lb. .56¼- —
(Pink and green granulations 5c. per lb. higher.)
Freight equald, shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver. lb. .33 - —
non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works. lb. .51 - —
dms., l.c.l. works ..... lb. .51¾- —
tanks, works ..... lb. .46 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., dlvd lb. .42½- —
dms., l.c.l., l.t.l., dlvd ..... lb. .43½- —
tanks, dlvd. ..... lb. .40 - —
tech., esterification, dms., t.l., f.o.b. shipping point lb. .41½- —
tanks, same basis ..... lb. .39 - —
tech., polymerization, dms., t.l., f.o.b. shipping point lb. .42½- —
tanks, same basis ..... lb. .40 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .26 - —
dms., l.c.l., l.t.l., frt. alld ..... lb. .27 - —
tanks, frt. equald ..... lb. .23 - —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd ..... lb. .32¼- —
bgs., l.c.l., dlvd. ..... lb. .33 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 2.65 - 2.75
powd., 30 mesh., fib., dms lb. 2.40 - —
dl-Alanine, dms., 100-lbs. or more, f.o.b. works lb. 5.25 - —
dms., 1-99 lbs., same basis ..... lb.10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l. dlvd lb. .99 - —
fib. dms., l.c.l., dlvd ..... lb. 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs ..... lb. 1.50 - 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb. 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls., same basis, lb. 1.35 - —
Alkali blue prices 1c. higher W. of Rockies.
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½% dms. frt. alld. ..... lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd ..... lb. .32½- —
dms., t.c.l., dlvd. ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb. cbys., 55 to 990 lbs. works, lb. 1.57 - —
Allyl chloride, dms., c.l., dlvd ..... lb. .17½- —
dms., l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat., bitter, f.p.a., bots. lb. 2.75 - 3.45
NF, bots. ..... lb. 3.00 - 3.30
sweet, USP, cns., dms ..... lb. .70 - 1.30

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
		e.p.	end point	Pac.	Pacific
a.p.a.	available phosphoric acid	equald.	equalized	pf.	proof
		exp.	expressed	phos.	phosphate
approx.	approximately	Ext.	external	photo.	photographic
artif.	artificial	F.	fahrenheit	pkgs.	packages
ASTM	American Society for Testing Materials	ferment.	fermentation	powd.	powdered
		f.f.a.	free fatty acid	precip.	precipitated
		f.f.c.	free from chlorine	prod.	producer
Atl.	Atlantic	fib.	fiber	pt.	point
Be.	Baume	f.o.b.	free on board	pulv.	pulverized
bbls.	barrels	f.p.a.	free of prussic acid	purif.	purified
bgs.	bags	frt.	freight	redist.	redistilled
bls.	bales	gal.	gallon	refd.	refined
bots.	bottles	gran.	granular	refy.	refinery
b.p.	boiling point	grd.	ground	reg.	regular.
b.p.l.	bone phosphate of lime	i.&a.	iron and aluminum	resub.	resublimed
				ret.	returnable
b.r.	boiling range	i.b.p.	initial boiling point	SD	specially denatured
bxs.	boxes	imp.	imported	s.d.	single distilled
C.	centigrade	incl.	included	S E.	southeast
cbys.	carboys	indust.	industrial	sec.	secondary
CD	completely denatured	kgs.	kegs	secs.	seconds
		l-	laevo	s.g.	specific gravity
c.i.f.	cost, insurance, freight	lacq.	lacquer	shipt.	shipment
		lb.	pound	soln.	solution
cks.	casks	l.c.l.	less carlots	s.u.	standard unit
c.l.	carlots	l.t.l.	less truckload	syn.	synthetic
cns.	cans	liq.	liquid	tanks.	railroad tankcars
coml.	commercial	mfrs.	manufacturers	tech.	technical
conc.	concentrated	m-	meta	tert-	tertiary
CP	chemically pure	m.a.p.	mixed aniline point	t.l.	truckloads
cps.	centipoises	min.	minimum	t.w.	tankwagons
cryst.	crystalline	m.p.	melting point	USP	U. S. Pharmacopoeia
cs.	cases	N-	nitrogen		
ctns.	cartons	n-	normal	vis.	viscosity
cyls.	cylinders	nat.	natural	VM&P	varnish makers & painters
d-	dextro	neut.	neutral		
dbl.	double	NF	National Formulary	W.	west
denat.	denatured	NNR	New and Nonofficial Remedies	whse.	warehouse
dest-dist.	destfuctively—distilled			w.w.	water-white
dl-	dextro-laevo				
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloe, Cape, cs ..... lb. .30 - .33
powd., cs. ..... lb. .60 - .65
Curacao, kgs. ..... lb. .60 - .70
powd., kgs. ..... lb. .80 - —
Aloin, USP, bbls., dms., kgs ..... lb. 3.25 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., works. 100 lbs. 4.30 - —
Lump, dms., works ..... 100 lbs. 5.05 - —
Powd., dms., works ..... 100 lbs. 5.20 - —
USP, burnt., dms ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum potassium, gran., bgs., works. 100 lbs. 4.55 - —
Lump, dms., works ..... 100 lbs. 5.30 - —
Powd., dms., works ..... 100 lbs. 5.45 - —
USP, burnt., dms ..... lb. .20 - .21
USP, hydrous, dms ..... lb. .07¾- .08
Alum, potash-chrome, dms ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .05¼- —
bgs., l.c.l., works ..... lb. .05½- .08¼
Aluminum acetate, basic soln., 24%, bbls., l.c.l, works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works ..... lb. .16½- —
cryst., dms., c.l., works 100 lbs.21.00 - —
dms., l.c.l., works ..... 100 lbs.21.50 - —
Soln., 32° cbys., c.l., works ... lb. .0495- —
cbys., l.c.l., works ..... lb. .0570- .1095
tanks, works ..... 100 lbs. 3.95 - —
NF, gran., dms., works ..... lb. .31 - .33
Aluminum fluoride, tech., anhyd., bgs., c.l., works. lb. .16¼- —
bgs., l.c.l., works ..... lb. .17¼- .19¼
bulk, c.l., basis 80% ..... lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb. higher.
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs.11.00 - —
containers extra, l.c.l., works. 100 lbs.11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0365- —
bgs., 20,000-40,000 lb. lots, same basis lb. .039 - —
bgs., 2,000-20,000 lb. lots, same basis lb. .049 - —
bulk, c.l., same basis lb. .03¼- —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
8-9½% Al_2O_3, fib. dms., works. lb. .19 - —
fib. dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb. ingots, 10,000-lb. lots, frt. alld lb. .2310- —
50-lb. pigs, 10,000-lb. lots, frt alld. lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .71 - —
Standard grade, dms ..... lb. .48½- —
Aluminum powder, lining, extra-fine, dms lb. 1.13 - —
Standard grade, dms ..... lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs. 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or more.
Aluminum resinate, precip., 3.4% Al, dms lb. .40¼- —
Aluminum stearate, dibasic, ctns., c.l. lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 - —
bulk, c.l., same basis ..... ton.40.00 - —
lump, bgs., c.l., same basis ton.44.00 - —
iron-free, bgs., c.l., works, frt. equald..100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works ..... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
P-Aminoacetanilide, tech., paste, dms., frt. alld. lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 - 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms., frt. alld. lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd. lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld. lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld. lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies. ton.84.00 - —
refrigeration, tanks, works, frt. equald. E. of Rockies. ton.90.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton.91.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l., works, frt. equald. 100 lbs. 8.25 - —
bgs., l.c.l., same basis. 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms. lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb. lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton.325 - —
dms., ton lots, ex whse. 100 lbs.20.40 - —
dms., smaller lots, ex whse. 100 lbs.21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works. 100 lbs. 7.00 - —
dms., l.c.l., works ..... 100 lbs. 9.00 - —

Ammonium bichromate, dms., works, lb. .42 - .43
Ammonium bifluoride, dms., dlvd lb. .2145- .2245
Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald. lb. .44 - —
dms., l.c.l., same basis..... lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l.. lb. .15½- —
Ammonium chloride, white, tech., fine gran., bgs., c.l., works, 100 lbs. 6.00 - —
bgs., l.c.l., works.....100 lbs. 8.00 - 8.45
USP, gran., 250-lb. dm..... lb. .17¼- —
Ammonium citrate, dibasic, 250-lb. dm, f.o.b. works lb. .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works E. lb. .45 - —
Ammonium hydroxide (see Ammonia aqeous).
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld. lb. .20½- —
dms., l.t.l., frt. alld..... lb .21½- —
tanks, frt. alld..... lb. .19½- —
Ammonium lignin sulfonate, bgs., c.l., works 100 lbs. 3.25 - —
bgs., l.c.l., works.....100 lbs. 3.40 - 3.65
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., 400- lb. dms., 15,000-lbs. works, lb. 1.22 - —
400-lb. dms., 2,000-lb. contracts, works lb. 1.23 - —
400-lb. dms., works..... lb. 1.24 - —
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., f.o.b. works..ton.64.00 - —
with dolomite, 20.5% N, bgs., c.l., Hopewell, Va. ton.48.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price..ton.64.00 - —
Ammonium oxalate, tech., fine gran., 250-lb. dm., f.o.b. works E lb. .28½- —
Tech., powd., 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse 100 lbs.14.23 - —
bgs., smaller lots, ex whse. 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
dms., smaller lots, works... lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald. lb. .09¼- —
bgs., l.c.l., same basis..... lb. .10 - —
Dibasic, NF, V, bbls., dms lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .12¼- .13¼
Ammonium sulfamate, bgs., c.l., t.l., works. lb. .19 - —
bgs., l.c.l., works..... lb. .20½- .27
Ammonium sulfate, standard granular, bulk, f.o.b. works, base price ton.32.00 - —
Ammonium sulfate, standard, gran., purif., c.l., 100-lb. bgs., f.o.b. works lb. .08½- —
Large granular, bulk, c.l., works. ton.35.00 - —
bgs., c.l., works..... ton.40.00 - —
Tech., bulk, c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works..... ton.56.00 - —
bgs., l.c.l., l.t.l., works 100 lbs. 3.20 - 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis. ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms., c.l., works lb. .20 - —
dms., l.c.l., works ..... lb. .22 - .26
Tech., soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, coml., 55-gal. dms., ton lots, 100% basis lb. 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms. lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic, dms. lb. 4.50 - 6.00
d-Amphetamine phosphate, fib. dms., 100-lb. lots lb.15.00 - —
dl-Amphetamine phosphate, dms.lb. 4.20 - 5.60
d-Amphetamine sulfate, fib. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies lb. .18½- .19
dms., l.c.l., same basis.... lb. .20 - .20½
tanks, same basis..... lb. .16 - .16½
Amyl acetate, ex pentane, reg., dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd. ..... lb. .21½- —
tanks, dlvd. ..... lb. .16½- —
tech., dms., c.l., dlvd. ..... lb. .17 - —
dms., l.c.l., dlvd. ..... lb. .18½- —
tanks, dlvd. ..... lb. .14½- —
Amyl acetate, syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., c.l., dlvd. ..... lb. .20½- —
tanks, dlvd. ..... lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd. lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld. lb. .19 - —
dms., l.c.l., frt. alld..... lb. .20½- —
tanks, frt. alld. ..... lb. .16½- —
Amyl alcohol, primary, dms., c.l., frt. alld. lb. .20¼- —
dms., l.c.l., frt. alld..... lb. .21¼- —
tanks, frt. alld..... lb. .17¼- —
Sec-synthetic, dms., c.l., works, frt. alld. lb. .19 - —
dms., l.c.l., same basis.... lb. .20½- —
tanks, same basis ..... lb. .17 - —
Tert-synthetic, dms., c.l., frt. alld. E. lb. .17 - —
dms., l.c.l., frt. alld. E. .... lb. .18½- —
tanks, frt. alld. E. ..... lb. .14½- —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works..... lb. .43 - —
tanks, works ..... lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works ..... lb. .70 - —
tanks, works ..... lb. .60 - —
Amyl n-butyrate, dms. ..... lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms. lb. 1.70 - 2.20
p-tert Amyl phenol, dms., c.l., works, lb. .26¾- —
dms., l.c.l., works ..... lb. .27¾- —
Amyl salicylate, cns., dms. ..... lb. .71 - —
Amyris oil, dms. ..... lb. 1.55 - —
Anethol, tech., dms. ..... lb. .80 - .92
USP, cns., dms. ..... lb. 1.05 - —
Angelica root, bls..... lb. .85 - .90
Angelica root oil, bots..... lb.120.00 -140.00
Angelica seed oil, bots..... lb.120.00 -130.00
Aniline dms., c.l., frt. alld..... lb. .20 - —
dms., l.c.l., frt. alld..... lb. .21 - —
tanks, frt. alld. ..... lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., t.l., 20,000 lbs. min., frt. alld. lb. .33 - —
dms., l.c.l., same basis..... lb. .35 - —
Anise oil, USP, dms..... lb. 1.75 - 3.00
Anise seed, Mexican, bgs..... lb. .16 - —
Spanish, bgs. ..... lb. .16½- —
Anisic aldehyde, dms..... lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld. lb. .80 - —
dms., l.c.l., same basis..... lb. .82 - —
tanks, same basis ..... lb. .78 - —
p-Anisidine, dms., works..... lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd. lb. 1.15 - —
Anthraquinone, 99.5%, bbls., c.l., frt alld. lb. .83 - —
bbls., l.c.l., same basis..... lb. .86 - —
Electrical grade, bbls., l.c.l., same basis. lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 - —
cs., c.l., mines..... lb. .29½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½- —
bgs., l.c.l., frt. alld. ..... lb. .28 - —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd. lb. .23 - —
bgs., smaller lots, dlvd..... lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works ..... lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E. lb. .69½- —
USP, powd., 250-lb. dm., same basis lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms.... lb. .55 - .70
Arabic gum, amber sorts, 10 bgs. lb. .27 - —
USP, powd., bbls. ..... lb. .31 - .34
Areca nuts, powd., bbls. ..... lb. .13 - —
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
l-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.60.00 - —
l-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .75 - —
Aromatic petroleum solvents (see Solvent Naphtha, petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works ..... lb. .0.31 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works ..... lb. .06½- .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. ..... lb. 2.85 - —
Asafetida gum, cns ..... lb. .36 - .40
Powd., bbls., dms..... lb. .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton.86.00 - —
7D, c.l. (30 tons), mines ton.75.00 - —
7F, c.l. (30 tons), mines ton.71.00 - —
7H, c.l. (30 tons), mines ton.61.00 - —
7K, c.l. (30 tons), mines ton.50.00 - —
7M, c.l. (30 tons), mines ton.44.00 - —
7R, c.l. (30 tons), mines ton.43.00 - —
7RF, c.l. (30 tons), mines ton.44.00 - —
7T, c.l. (30 tons), mines ton.41.00 - —
7TF, c.l. (30 tons), mines ton.44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 100-kilos. kilo. 7.35 - —
dms., less than 100-kilos..... kilo.7.75 - —
Ash, black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines..ton.43.50 - —
ex-whse, 5 tons or more, N. Y., N. J. ton.89.50 - —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines. ton.46.00 - —
270°-295°F. fusing pt., bgs., c.l., mines..ton.43.00 - —

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Asphalt, petroleum, cut-back, tanks, tankwagon, refy ..... gal. .09½- —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy ton.20.00 - —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins ..... oz. 5.75 - 7.50
Atropine sulfate USP, bots ..... oz. 5.25 - 5.75
Azelaic acid, bgs., c.l., dlvd. ..... lb. .40 - —
bgs., ton lots, same basis ..... lb. .41 - —

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs lb. 1.25 - 1.35
Barberry root bark, bgs lb. 1.00 - 1.10
Barbital, NF, 100-lb. dms., f.o.b. works lb. 4.50 - —
Barbital sodium, NF, 100-lb. dms. lb. 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton.111.50 - —
bgs., smaller lots, works ton.126.50 - —
Barium chlorate, dms., works lb. .32 - .41
Barium chloride, anhyd., bgs., c.l., works ton.176.00 - —
bgs., l.c.l., works ton.196.00 - —
NF, cryst., dms., 400-lbs., works lb. .23 - —
Tech., cryst., bgs., c.l., works. 100 lbs. 7.00 - —
bgs., l.c.l., works ..... 100 lbs. 8.00 - —
Barium chromate, bgs., frt. equald. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 - —
bgs., l.c.l., l.t.l., frt. equald ton.218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs.11.25 - —
bgs., l.c.l., frt. equald 100 lbs.11.75 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd. lb. .16 - —
bbls., l.c.l., l.t.l., dlvd. ..... lb. .17 - —
Barium oxide, grd., dms., c.l., t.l., frt equald ton275.00 - —
dms., l.c.l., l.t.l., frt. equald. ton.285.00 - —
Barium peroxide, dms., frt. equald. lb .20 - —
Barium stearate, ctns., c.l., frt. alld. lb. .41 - —
ctns., l.c.l, same basis ..... lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm. lb. .19½- —
Barium sulfide, dms., c.l., works. ton.100.00 - —
dms., l.c.l., works ..... ton.110.00 - —
Baryles, southern, off-color, bgs., mines ton.30.00 - —
95-75%, bgs., mines ..... ton.30.00 - —
white, water-grd., paper bgs., c.l., St. Louis ton.60.00 -60.25
paper bgs., ex whse., New York ton.84.85 - —
Battery acid, cbys., c.l., works E. 100 lbs. 2.35 - —
cbys, l.c.l., works, E ..... 100 lbs. 2.65 -10.95
Bauxite, bulk, mines ..... ton. 7.00 -10.00
Bay oil, NF, Puerto Rican, 50-55%, cns lb. 2.40 - 2.70
55-60%, cns. ..... lb. 2.55 - —
NF, West Indian, 50-55%, cns. dms lb. 2.50 - —
Bayberry wax, bgs ..... lb. .45 - .50
Beeswax, crude, African bgs. ..... lb. .50 - .52
Brazilian, bgs. ..... lb. .55 - .56
Central American, bgs. ..... lb. .53 - —
Chilean, bgs. ..... lb. .56 - —
Refd., USP, bleached white, bricks, 100-lb. ctns lb. .69 - .71
white, slabs, 100-lb. ctns lb. .68 - .70
yellow, bricks, 100-lb. ctns lb. .59 - .61
yellow, slabs, 100-lb. ctns lb. .58 - .60
Belladonna leaf, bls. ..... lb. .24 - .26
Belladonna root, bls. ..... lb. .28 - .35
Bentonite, dom, 200 mesh, bgs., c.l., mines ton.14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton.95.20 - —
bgs., 1-ton lots, ex whse ton.99.00 - —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse ton.93.40 - —
bgs., 1-ton lots, ex whse ton.97.16 - —
Benzal chloride, cbys., works lb. .44 - —
Benzaldehyde, NF, dms. ..... lb. .80 - 1.05
Tech., dms., c.l., t.l. ..... lb. .47 - —
dms., l.c.l. ..... lb. .48 - —
Benzene, pure or nitration, tanks, works:
Bethlehem, Pa ..... gal. .34 - —
Birmingham district ..... gal. .34 - —
Chicago district ..... gal. .34 - —
Cleveland district ..... gal. .34 - —
Geneva, Utah ..... gal. .34 - —
Houston, Tex. ..... gal. .34 - .40
Johnstown, Pa. ..... gal. .34 - —
Benzene, pure or nitration, tanks, works:
Lackawanna, N. Y. ..... gal. .34 - —
Lone Star, Tex. ..... gal. .34 - —
Lorain, Ohio ..... gal. .34 - —
Middletown, Ohio ..... gal. .34 - —
Mennequa, Colo. ..... gal. .34 - —
Philadelphia district ..... gal. .34 - —
Pittsburgh district ..... gal. .34 - —
Sparrows Point, Md. ..... gal. .34 - —
Syracuse, N. Y. ..... gla. .34 - —
Terre Haute, Ind ..... gal. .34 - —
Youngstown, Ohio ..... gal. .34 - —
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065- —
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis ..... lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb. 2.20 - —
AAOT, bbls., dlvd. ..... lb. 2.55 - —
Lightfast, bbls., dlvd. ..... lb. 3.40 - —
Benzocaine, dms., 100-lbs., frt. alld. lb. 3.25 - —
Benzoic acid, tech., dms., c.l., t.l., frt. alld lb. .25 - .37
dms., l.t.l., same basis ..... lb. .29 - .41
tanks, same basis ..... lb. .21 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb lots lb. .50 - —

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. ..... lb. .32 - —
Benzophenone, dms. ..... lb. 1.40 - 1.65
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald lb. .21 - —
cbys., smaller lots, frt. equald lb. .23 - —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald lb. .22 - —
cbys., l.c.l., same basis lb .23 - —
tanktrucks, dlvd. Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works lb. .98 - 1.08
Benzyl acetate, f.f.c., cns., dms. lb. .54 - —
Benzyl alcohol, NF, dms. ..... lb. .54 - —
tech. dms., dlvd. lb. .½- .65
Benzyl benzoate, USP, 40-lb. dms lb. .64 - —
Benzyl chloride, tech., cbys., dms., c.l. works, frt. equald lb. .22½- .25½
cbys., dms., l.c.l., same basis lb. .23½- .25½
tanktrucks, dlvd. Metropolitan area lb. .21 - —

A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c. lower.

Benzyl cinnamate, cns. lb 3.30 - 3.60
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld lb. 1.25 - —
12-49 dms., same basis ..... lb. 1.35 - —
1-11 dms., same basis ..... lb. 1.90 - —
Benzyl formate, cns. ..... lb. 1.85 - 2.10
Benzyl isoeugenol, cns ..... lb. 9.25 - —
Benzyl propionate, bots. ..... lb. 1.35 - 1.65
Benzyl salicylate, bots ..... lb. 1.50 - 1.85
Benzylidine acetone, bots. ..... lb. 1.75 - 1.80
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns ..... lb.56.50 - —
Berberine hydrochloride, bots .. lb.56.50 - —
Bergamot oil, nat., NF, Italian, cns. lb.11.00 -12.00
Betagammapicoline (see b.g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethynaphthalene (see Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphtholamine).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine)
BHC (see Benzene hexachloride, tech.).
Biotin, cryst., bots ..... gram.10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns ..... lb. 1.50 - 1.90
Rectified, cns. ..... lb 1.75 - 2.00
Bismuth chloride, jars ..... lb. 5.11 - —
Bismuth hydroxide, dms ..... lb. 4.60 - 4.65
Bismuth metal bxs., ton lots ... lb. 2.25 - —
Bismuth nitrate, cryst., 250-lb. dm. lb. 2.25 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth subcarbonate, USP, 150-lb. dm lb. 3.70 - —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works lb. 4.43 - —
Bismuth subiodide, fib dms lb. 5.37 - —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b. works lb. 3.15 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 4.25 - —
Bismuth trioxide, 100-lb. dms., f.o.b. works lb. 4.40 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .29½- —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 - —
bgs., l.c.l., same basis ..... lb. .31 - —
Blackberry root bark, bls ..... lb. .50 - .55

BLACK PIGMENTS

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton.160.00 - —
bgs., l.c.l., works ..... ton.170.00 - —
bgs., l.c.l., New York whse ton.200.00 - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton 5.50 - —
Bloodroot, bls. ..... lb. .75 - .80

BLUE PIGMENTS

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes).
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms. lb. 2.10 - —
Peruvian, dms. ..... lb. 1.70 - —
BO-4 acid maroons, pure, bbls lb. 1.75 - —
Designated, bbls. lb. 1.50 - —
Bone black, dms., c.l., frt. alld. lb. .1750- .2225
l.c.l., works ..... lb. .1950- .2425

Pacific coast bone black prices 3½c. per lb. higher.

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Bonemeal, steamed, works, E. ton.80.00 • —
Bone phosphate, defluorinated ni lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic).
Borax, tech., anhyd., 99½%, bgs., c.l., works ton.92.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.42 • —
bgs., smaller lots, same basis 100 lbs. 8.67 -10.67
bulk, c.l., works ton.83.00 • —
Borax, tech., gran., decahydrate, 99½%, bgs., c.l., works. ton.50.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 5.32 • —
bgs., smaller lots, same basis. 100 lbs. 6.57 • 8.57
bulk, c.l., works ton.43.50 • —
pentahydrate, 99½%, bgs., c.l., works ton.64.50 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.05 • —
bgs., smaller lots, same basis 100 lbs. 7.30 • 9.30
bulk, c.l., works ton.58.00 • —
USP, powd., bgs., c.l., works. ton.54.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.45 • —
bgs., smaller lots, same basis. 100 lbs. 7.70 • 9.70
Bordeaux powder, tribasic, bgs., c.l., dlvd. lb. .24 • —
bgs., l.c.l., same basis lb. .26 • —
Boric acid, tech., anhyd., 99.9%, bgs., c.l., works ton.335.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.19.62 • —
bgs., smaller lots, same basis. 100 lbs.20.87 -22.87
cryst., 99.9%, bgs., c.l., works. ton.163.50 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.11.03 • —
bgs., smaller lots, same basis. 100 lbs.12.30 -14.30

Boric acid, tech., cryst., 99.9%, dms., c.l., works ton.188.50 • —
dms., ton lots, ex whse., New York or Chicago. 100 lbs.12.30 • —
bgs., smaller lots, same basis 100 lbs.13.03 • —
gran., 99.9%, bgs., c.l., works. ton.112.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 8.47 • —
bgs., smaller lots, same basis. ton.174.25 • —
dms., c.l., works ton.137.00 • —
dms., ton lots, ex whse, New York or Chicago 100 lbs. 9.72 • —
dms., smaller lots, same basis 100 lbs.10.47 • —
bulk, c.l., works ton.106.00 • —
powd., bgs., ton lots, ex whse., New York or Chicago. 100 lbs. 8.85 • —
bgs., smaller lots, same basis 100 lbs.10.10 -12.10
Boric acid, powd., dms., smaller lots, same basis 100 lbs.11.45 • —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 • —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 • —
100-lb. cyls., works lb. 1.70 • —
Boron trifluoride, gas, cyls., t.l., works lb. .70 • —
cyls., l.t.l., works lb. .70 • —
Brimstone (see Sulfur).
Broenner's acid, bbls. lb. 1.53 • —
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .32 • —
cs., l.c.l., same basis lb. .34 • .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 • —
ret. dms., l.c.l., same basis lb. .31 • .34
tanks, same basis lb. .21½ • —
Bromochloromethane, dms., c.l., frt. equald lb. .48 • —
dms., l.c.l., same basis lb. .50 • —
tanks, same basis lb. .47 • —
Bromoform, pharmaceutical grade, 100-lb. cbys. lb. 1.80 • 1.90

Bromstyrol, bots. lb. 5.35 • 5.70
Brucine, cns oz. Nominal.
Brucine sulfate, NF, cns. 1.45 • 1.75
Buchu leaves, bbls. lb. .70 • .75

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example, prices on Brown, Iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy. lb. .21 • —
cyls., l.c.l., refy. lb. .22 • —
tanks, dlvd. lb. .14½ • —
Butene-1, tanks, works lb. .0625 • —
Butene-2, tanks, works lb. .0570 • —
n-Butyl acetate, ferment. dms., c.l., frt. alld. lb. .17 • —
dms., l.c.l., same basis lb. .18½ • —
tanks, same basis lb. .14½ • —
Syn., dms., c.l., dlvd. E. lb. .17 • —
dms., l.c.l., same basis lb. .18½ • —
tanks, same basis lb. .14½ • —
sec-Butyl acetate, syn., dms., c.l., dlvd. E. lb. .14¾ • —
dms., l.c.l., same basis lb. .16¼ • —
tanks, same basis lb. .12¼ • —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E lb. .42½ • —
dms., l.t.l., same basis lb. .43½ • —
tanks, same basis lb. .40 • —
Prices of n-Butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
n-Butyl alcohol, ferment, dms., c.l., frt. alld. lb. .18 • —
dms., l.c.l., frt. alld. lb. .19½ • —
tanks, frt. alld. lb. .15½ • —

n-Butyl alcohol, syn., dms., c.l., dlvd lb. .18 • —
dms., l.c.l., frt. alld lb. .19½ • —
tanks, dlvd. lb. .15½ • —
Sec-synthetic, dms., c.l., dlvd lb. .15 • —
dms., l.c.l., dlvd. lb. .16½ • —
tanks, dlvd. lb. .12½ • —
n-Butyl alcohol, tert-synthetic, dms., c.l., frt. alld., dlvd E lb. .16 • —
dms., l.c.l., same basis lb. .17½ • —
tanks, same basis lb. .13½ • —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½ • —
dms., l.c.l., works lb. .38¼ • —
n-Butyl ether, dms., c.l., works lb. .35¼ • —
dms., l.c.l., works lb. .36 • —
tanks, works lb. .33¼ • —
Butyl lactate, dms., c.l., frt. alld. E. Rockies lb. .42½ • —
dms., l.c.l., same basis lb. .43½ • —
tanks, same basis lb. .40 • —
Butyl laurate, dms., works lb. .37½ • —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 • —
dms., l.c.l., works lb. .55½ • —
Butyl oleate, refd., dms., l.c.l., works lb. .32 • —
Butyl phenylacetate, dms. lb. 4.50 • 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E. of Mississippi lb. .27¼ • —
dms., l.c.l., same basis lb. .28¼ • —
Butylamine (see Mono-, Di- and Tributylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb. .47 • —
dms., l.c.l., same basis lb. .47½ • —
tc., t.t., same basis lb. .45 • —
Butylated hydroxyanisole, food grade, dms., dlvd. lb. 4.75 • —
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).

Best detergent raw material for heavy-duty formulations

Oronite's recent product and production achievement provides the detergent industry its best commercial source for a high molecular weight alkylbenzene. And ALKANE "60" can be sulfonated to the same quality as the best dodecylbenzenes. For complete information and technical data on new ALKANE "60" contact the Oronite office nearest you.

IMPROVED FOAM—New ALKANE "60" minimizes the need for foam additives. In dishwashing foam tests results showed the ALKANE "60" based product, without a foam additive, performing as well as dodecylbenzene products which included a foam additive. And in washing machine foam tests ALKANE "60", without a foam additive, performed as well as a typical dodecylbenzene with an additive.

Formulation savings and processing advantages can be obtained by substitution of ALKANE "60" sulfonate for foam additive.

BETTER DETERGENCY—In the Terg-O-Tometer detergency test, ALKANE "60" based heavy-duty detergents proved to be better cleaning agents than dodecylbenzene derived products. The ALKANE "60" based product removed more soil at all concentrations—performed well in both soft and hard water.

PROCESSING—ALKANE "60" can be sulfonated and processed into finished detergents as easily as ALKANE "56", without manufacturing modification. Product results are comparable to the high sulfonation quality obtained with ALKANE "56".

ORONITE CHEMICAL COMPANY
A CALIFORNIA CHEMICAL COMPANY SUBSIDIARY
EXECUTIVE OFFICES • 200 Bush Street, San Francisco 20, California
SALES OFFICES • New York, Boston, Wilmington, Chicago, Cincinnati, Cleveland, Houston, Tulsa, Los Angeles, San Francisco, Seattle
FOREIGN AFFILIATE • California Chemical International, Inc., San Francisco, Geneva, Panama
6050

ORONITE will continue to supply ALKANE "56", the standard of the detergent industry

Butylated Hydroxytoluene—Carbon Black

Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
1,3-Butylene glycol, dms., c.l., t.l., dlvd lb. .20½- —
dms., l.c.l., l.t.l., f.o.b. works lb. .22 - —
tanks, dlvd lb. .18 - —
p-tert-Butylphenol, bgs., c.l., dlvd., lb. .27½- —
bgs., l.c.l., works lb. .28½- —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. lb. .23½- —
tanks, dlvd. lb. .19½- —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½- —
tanks, same basis lb. .32½- —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works. lb. .40 - —
dms., l.c.l., same basis lb. .43 - —

C

Cacao butter (see Cocoa butter).
Cadmium CP red dark shade, bbls., frt. alld. E. of Rockies lb. 5.55 - —
Light shade, bbls., same basis lb. 4.65 - —
medium shade, bbls., same basis. lb. 5.30 - —
Medium light shade, bbls., same basis lb. 4.90 - —
Orange-red shade, bbls., same basis lb. 4.30 - —
Yellow, all shades, bbls., frt. alld. E. of Rockies lb. 2.85 - —
Cadmium iodide, 25-lb. fib. dms lb. 6.75 - 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd lb. 1.30 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies lb. 1.65 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 1.95 - —
Red, light shade, bbls., same basis. lb. 1.72 - —
Red, medium shade, bbls., same basis lb. 1.87 - —
Red, medium light shade, bbls., same basis lb. 1.80 - —
Red, maroon shade, bbls., same basis lb. 2.03 - —
Cadmium-selenide lithopone maroon, bbls., frt. alld E. of Rockies lb. 2.76 - —
Orange, bbls., same basis lb. 1.58 - —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb. 1.72 - —
Red, dark shade, bbls., same basis. lb. 2.56 - —
Red, light shade, bbls., same basis. lb. 1.88 - —
Red, medium shade, bbls., same basis lb. 2.00 - —
Red, medium-light shade, bbls., same basis lb. 2.23 - —
Caimium-selenide lithopone, yellow, all shades, bbls., frt. alld. E. of Rockies lb. 1.19 - —
Caffeine, NF, citrated, dms., 100-lb. lots or more lb. 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 2.10 - —
Caffeine, USP, nat., cryst., hydrous, dms., 100-lb. lots or more. lb. 1.96 - —
USP, syn., anhyd., dms., 100-lb. lots or more lb. 2.10 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 - —
Cajuput oil, native, cns. lb. 1.75 - 2.00
Redist., USP, cns. lb. 1.90 - 2.10
Calamine, USP, dms. lb. .34 - —
Calamus oil, bots. lb. 12.00 -20.00
Calciferol, cryst., 10-kilo or more lots, works gram. .54 - —
1-10 kilo lots gram. .55 - —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate, fib. dms., 100 lbs. or more, frt. adjusted lb. 3.10 - —
Calcium arsenate, dealers, bgs., c.l., frt. alld. lb. .09 - .09¼
bgs., l.c.l., same basis lb. .10 - .10½
Calcium bromide, NF, jars, 100 lbs. or more lb. .97 - —
Calcium carbide, standard generator size, 600-lb. dms., c.l., dlvd ton. 149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton. 10.50 - —
Calcium carbonate, chalk, whiting, 325 mesh, bgs., c.l., works. ton. 32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton. 30.00 - —
10 to 20 microns, bgs., c.l., works ton. 17.00 -18.00
precip., dense, bgs., c.l., works. ton. 30.00 -38.50
bgs., l.c.l., works ton. 45.00 -53.50
medium, bgs., c.l., works. ton. 38.00 - —
bgs., l.c.l., works ton. 48.00 -53.00
Calcium Carbonate, surface treated, bgs., c.l., works. ton. 42.00 -44.00
bgs., l.c.l., works ton. 57.00 -59.00
ultrafine, bgs., c.l., works. ton. 117.50 -167.50
bgs., l.c.l., works ton. 137.50 -187.50
Calcium chloride, conc., flake or pellet, 94-97%, paper bgs., c.l., works, frt. equald. ton. 39.30 - —
Flake, 77-80%, paper bgs., c.l., works, frt. equald ton. 32.00 - —
Liquor, 40%, tanks, frt. equald. ton. 12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton. 37.00 - —
Purif., gran., dms. lb. .27 - —
Calcium chloride, solid, 73-75%, dms., c.l., frt. equald ton. 29.50 - —
dms., l.c.l., works, frt. equald. ton. 36.00 -73.00
USP, gran., dms. lb. .32 - —
Calcium chromate, bgs., dlvd. lb. .37 - —
Calcium cyanide, dms., c.l., dlvd, E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb. .24 - .55
Calcium cyclamate, 100-lb. dms lb. 1.95 - —
Calcium gluconate, USP, AA grade, 100-lb. dm., ton lb. .73½- —
USP, powd., 100-lb. dm., ton lb. .66½- —
Calcium hydride, lump, dms., works. lb. 2.20 - 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd. E. of Rockies cs. 23.85 -25.60
100-lb. dms., same basis dm. 33.30 -36.55
Calcium hypophosphite, dms., 1,000-lb. lots lb. 1.28 - —
Calcium iodide, jars lb. 4.52 - —
Calcium lactate, NF, dms., f.o.b. works lb. .43 - .46
Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms., frt equald lb. .30 - —
Calcium pantothenate, USP, jars, 1 kilo or more kilo. 35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms. lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, bgs., c.l., frt. equald 100 lbs. 16.00 - —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton. 86.00 - —
bgs., c.l., t.l., f.o.b. Texas City works ton. 80.50 - —
bgs., l.c.l., frt. equald ton. 96.00 - —
Dibasic, feed grade, 21% P., bgs., c.l., t.l., frt. equald ton. 97.65 - —
bgs., l.c.l., frt. equald ton. 107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs., c.l., prices.
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald. 100 lbs. 7.45 - —
bgs., smaller lots, same basis. 100 lbs. 7.95 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald. 100 lbs. 10.00 - —
Calcium propionate, any quantity, dms., dlvd. E. of Rockies. lb. .34½- —
Prices W. of Rockies 3c. per lb. more.
Calcium phytate, bgs., 50 lbs. or more. f.o.b. warehouse N. Y lb. .39 - —
Calcium resinate, precip., dms., ton lots. frt. alld., works lb. .40¼- —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½- —
Calcium silicate paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Calcium sulfate (see Gypsum).
Calomel, NF, mild, powd., dms., 100-lbs., f.o.b. works lb. 4.32 - —
NF, mild, precip., dms., 100-lbs., f.o.b. works lb. 5.67 - —
Camphene, 46° m.p., dms. incl., c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16½- —
tanks, same basis lb. .12½- —
Camphene, chlorinated, 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs lb. 3.63 - 3.70
Nat., USP, powd., cs., 100-lb. lots. lb. .60 - .65
tablets, 1-oz. cs. lb. .85 - .90
Nat., USP, gran., bbls., 2,000-lb. lots lb. .59 - —
Syn., tech., 1 bbl. or more lb. .48 - —
Syn., USP, gran., powd., bbls., 1,000-lb. lots lb. .60 - —
bbls., smaller lots lb. .61 - —
tablets, ctns., 1,000-lb. lots. lb. .85 - —
ctns., 500-lb. lots lb. .86 - —
ctns., smaller lots lb. .87 - —
Camphor oil, sassafrassy, dms. lb. .35 - .55
White, dms. lb. .26 - .50
Cananga oil, native, cns. lb. 5.00 - 6.50
Rectified, cns. lb. 7.25 -10.00
Candelilla wax, crude, bgs. lb. .55 - .58
Refd., pure, bgs. lb. .60 - .63
Powdered Candelilla wax 20 to 100 mesh, 8c. higher.
Cantharides, Chinese, cs. lb. 1.00 - —
powd., bgs. lb. 1.15 - —
Russian, bgs. lb. 2.00 - 2.15
powd., bgs. lb. 2.15 - 2.30
Capric acid, dms. lb. .32½- .34¾
tanks lb. .29¾- —
Caprolactum monomer, bgs., c.l., t.l., f.o.b. works lb. .52 - —
bgs., l.c.l., l.t.l., same basis lb. .57 - —
tanks, same basis lb. .49 - —
Capryl alcohol, 85% dms., c.l., t.l., works lb. .19 - —
dms., l.t.l., same basis lb. .19½- —
tanks, frt. equald. lb. .16½- —
Sec., 92-99%, dms., c.l., f.o.b. works lb. .22 - —
dms., l.c.l., f.o.b. works lb. .23 - —
tanks, f.o.b. works lb. .19½- —
Caprylic acid, dms. lb. .32¼- .34¾
tanks lb. .29¾- —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - —
NF, from African pepper, dms. lb. 4.50 - —
Caraway oil, NF, dms. lb. 3.15 - 3.40
Caraway seed, Danish, bgs. lb. .16 - —
Dutch, bgs. lb. .20½- —
Polish, bgs. lb. .17¼- —
Carbazole, 97%, bbls, ton lots, works lb. 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs., c.l., works lb. .08½- —
bgs., l.c.l., works lb. .16¼- —
Furnace, fast extruding, bgs., c.l., works lb. .06¾- —
ctns., l.c.l., whse. lb. .13½- —

chemicals on the move... for you

Modern chemistry has created hundreds of new and better formulations to keep pace with America's stepped-up personal needs. For cleanliness, soaps and detergents are measured in billions of pounds each year. Every day brings new chemical specialties to make our lives easier and better.

To meet varied requirements of these processors and formulators, Olin Mathieson is on the move. Currently we are increasing caustic/chlorine production in important growth areas — adding new plant facilities for the production of polyols — marketing a wide range of surfactants of outstanding performance. Olin Mathieson offers quality phosphates, alkalies, organics, and specialty chemicals in volumes to provide for changing market conditions.

Change is the challenge, and the future depends on the ability to predict change and prepare for it. As a step in providing for your future, let us review your chemical requirements now. In terms of future—or present—developments, our experience in chemical supply can be useful.

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Olin Mathieson
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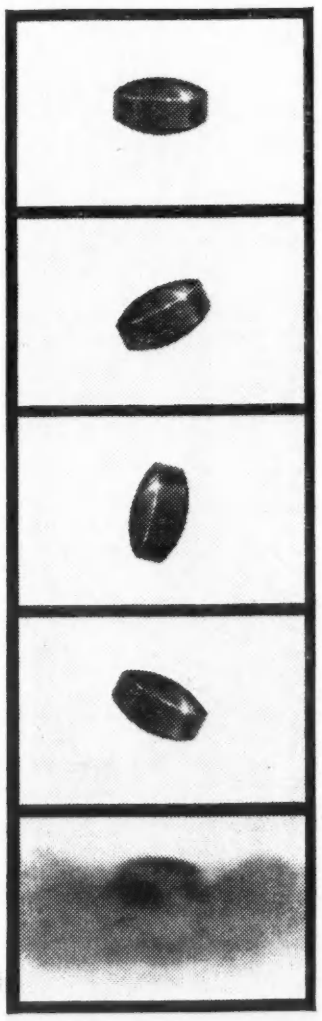
CHEMICALS

MATHIESON Ammonia • Bicarbonate of Soda • Carbon Dioxide • Caustic Soda • Chlorine • Formaldehyde • Hydrazine and Derivatives • Hypochlorite Products Methanol • Muriatic Acid • Nitrate of Soda • Nitric Acid • Soda Ash • Sodium Chlorite Products • Sodium Methylate • Sulfur (Processed) Sulfuric Acid • Urea • Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Ethanolamines • Glycol Ethers • Surfactants • Ethylene Dichloride

BLOCKSON Trisodium Phosphate • Trisodium Phosphate Chlorinated • Sodium Tripolyphosphate • Tetrasodium Pyrophosphate • Sodium Hexametaphosphate Monosodium Phosphate • Disodium Phosphate • Sodium Acid Pyrophosphate • Tetrapotassium Pyrophosphate • Sulfuric Acid • Hydrofluoric Acid Sodium Silicofluoride • Sodium Fluoride • Teox® 120 Surfactant

Carbon black, high abrasion, bulk, c.l., works lb. .07¼- —
bgs., c.l., works lb. .07¾- —
bgs., l.c.l., dlvd. or whse. lb. .14½- —
high modulus, bgs., c.l., works, lb. .06¼- —
ctns., l.c.l., whse. lb. .13 - —
semi-reinforcing, bgs., c.l., works lb. .05¾- —
bgs., ctns., l.c.l., whse. lb. .12½- —
pigment, high color beads, ctns., c.l., works lb. .78 - —
ctns., l.c.l., dlvd. or whse. lb. .87 - —
medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., l.c.l., dlvd. or whse. lb. .22½- —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E ton 60.00 -115.00
bulk, 3,000,000 lbs. or more, dlvd. Metropolitan areas, E ton 55.00 - —
Solid, bulk, wholesale, works ton 85.00 - —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal. dms., 30 dms. to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. lb. .0520- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld. lb. .12¾- —
dms., l.c.l., frt. alld. lb. .15¼- —
Tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾- —
dms., l.c.l., l.t.l., frt. alld lb. .14¼- —
tanks, frt. alld lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb lots, works lb. 4.00 - 4.25
dms., smaller lots, works lb. 4.10 - 4.75
Cardamom oil, NF, bots. lb. 39.00 -42.00
Cardamom seed, bleached "A" lb. 3.50 - —
Bleached "B" lb. 3.10 - —
Decorticated Alleppey, cs. lb. 2.30 - —
Guatemala, cs. lb. 3.05 - —
Green, Alleppey, bgs. lb. 2.15 - —
Ceylon, bgs. lb. 2.15 - —
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd. lb. 16.80 - —
bulk, smaller lots, dlvd. lb. 16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .72 - .73
North Country, No. 2, crude, bgs., ton lots lb. .82 - .84
refd., pure, ton lots lb. .91 - .92
North Country, No. 3, Ceara, ton lots lb. .74 - .75
Ceara, refd., pure, bgs., ton lots lb. .82 - .83
North Country, No. 3, Parnahyba, ton lots lb. .75 - .76
Parnahyba, refd., pure, bgs., ton lots lb. .83 - .84
No. 1, Ceara, yellow, bgs., ton lots, lb. 1.02 - 1.03
Parnahyba, yellow, bgs., ton lots lb. 1.03 - 1.05
Powdered carnauba wax, 20 to 100 mesh 8c. per lb. higher.
Carotene, tech., 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram, .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .144 - —
b-Carotene, in vegetable oil, sci., kilo 240.00 - —
solid suspension, 400,000 A units per gram, cns. kilo 57.60 - —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram, cns. kilo 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns.
Carvol, bots. lb. 5.00 - 5.40
Cascara sagrada bark, bulk lb. .32 - —
Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .56 - —
edible, acid, precip., 80 mesh, bgs., 10,000-lb. lots or more, works lb. .64 - —
Imp., inedible, acid-precip., grn., Argentine, bgs., c.l., ex-dock, Eastern seaports lb. .20¼- .20½
Australian, bgs., c.l., same basis lb. .22½- .23
Cashewnut shell, liquid, treated, dms., c.l., Newark, N. J. lb. .22 - —
dms., ton lots, same basis lb. .23 - —
dms., ton lots, same basis lb. .25 - —
Cassella acid, dms., frt. alld., 100% basis lb. 1.44 - 1.75
Cassia oil, redist., USP, cns. lb. 7.50 - 9.00
Cassia, Padang, "A," bls. lb. .30 - —
"B," bls. lb. .29 - —
"C," bls. lb. .28 - —
Korintje "A," bls. lb. .34 - —
"B," bls. lb. .30 - —
"C," bls. lb. .30 - —
Castor oil, dom., blown, dms., c.l. lb. .2550- —
dms., l.c.l. lb. .2650- —
Castor oil, dom., dehydrated, bodied, dms., c.l. lb. .2700- —
dms., l.c.l. lb. .2850- —
tanks lb. .2500- —
dehydrated, unbodied, dms., c.l. lb. .2500- —
dms., l.c.l. lb. .2660- —
tanks lb. .2360- —
hydrogenated, bgs., c.l. lb. .2450- —
bgs., ton lots lb. .2850- —
bgs., l.c.l., dlvd. lb. .3050- —
No. 1, dms., c.l. lb. .2150- —
dms., l.c.l. lb. .2300- —
tanks lb. .2000- —
No. 3, tech., dms., c.l. lb. .2125- —
dms., c.l., lb. .2225- —
tanks lb. .1925- —
Refd. deod., dms., c.l. lb. .2650- —
dms., l.c.l. lb. .2750- —
tanks lb. .2450- —
USP, dms., c.l. lb. .2350- —
dms., l.c.l. lb. .2450- —
tanks lb. .2150- —
Imported, No. 1, Braz., tanks lb. .18¾- .19
Sulfonated, 50%, dms., works lb. .15 - .15½
75%, dms., works lb. .19 - .19½
Castor oil acids, dehydrated, dms. lb. .44¼- .46¼
Split, dms. lb. .37¼- .38¼
Castor pomace, bgs., c.l., works ton 35.00 - —
Castoreum nat., cns. lb. 5.25 - —
Syn., cns. lb. 9.00 - —
Catechol, CP, cryst., fib., dms., works lb. 2.17½- —
Resub., dms., works lb. 4.29½- —
Catnip leaves, Southern, bls. lb. Nominal.
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil, USP XIII cns., dms. lb. 3.25 - 3.50
Cedarwood oil, cns., dms. lb. .70 - —
Celery seed, French, bgs. lb. .33 - —
Indian, bgs. lb. .19 - —
Cellulose acetate, flake, powd., bgs., t.l., dlvd. E lb. .36 - .51
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E lb. .545 - .555
17% butyryl content, bgs., dlvd. E lb. .595 - .605
38% butyryl content, bgs., dlvd. E lb. .545 - .555
38% butyryl content, half-second, bgs., dlvd. E lb. .545 - .555
50% butyryl content, bgs., dlvd. E lb. .585 - .595
Cellulose gum, methyl (see Methyl Cellulose).
Cellulose gum, pure, high vis., bgs., 23,000-lb. lots or more works, frt. alld lb. .57 - —
bgs., smaller lots, same basis lb. .59 - —
Cerium hydrate, 74% CeO, fib. dms., 100-lb. lots or more lb. 1.40 - —
77% CeO, fib. dms., 100-lb. lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate).
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd. lb. 1.85 - 1.90
bgs., smaller lots, dlvd. lb. 2.15 - —
Cetyl alcohol, NF, fib. cns., c.l., t.l., dlvd. E lb. .41½- —
fib. cns., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .39 - —
Extra, cns., c.l., t.l., dlvd. E lb. .48½- —
fib. cns., l.c.l., same basis lb. .50½- —
tanks, same basis lb. .46 - —
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian, bls. lb. .90 - 1.00
Roman, cs. lb. 1.50 - 1.75
Chamomile oil, blue Hungarian, bots. lb. 350.00 - —
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
fib. dms., 5-ton lots, works lb. .26½- .32½
fib. dms., smaller lots, works lb. .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone black).
Charcoal, hardwood, lump, bulk, c.l., f.o.b. plant ton 55.00 - —
briquets, bulk, c.l., f.o.b. plant ton 80.00 - —
5-lb. paper bgs., c.l., same basis ton 106.00 - —
20-lb. paper bgs., c.l., f.o.b. plant, ton 90.00 - —
40-lb. paper bgs. c.l., same basis ton 86.00 - —
Chenopodium oil, NF, cns. lb. 4.25 - 5.00
Chicago acid, paste, bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min., dms., c.l., works lb. .23 - —
dms., l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, dms., l.c.l., works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb. lots lb. 1.00 - —
jars, 500-lb. lots lb. 1.03 - —
jars, 100-lb. lots or less lb. 1.05 - —
Chlordan, agricultural, dms., c.l., frt. alld lb. .65 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt. alld lb. .66 - —
Chlordan, clarified, dms., c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt. alld lb. .70 - —
Chlorinated paraffin, 42%, dms., c.l. frt. alld lb. .16¾- —
dms., l.c.l., 10 dms. or more, same basis lb. .17¼- —
70%, dms., c.l., same basis lb. .18½- —
dms., l.c.l., 10 dms. or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. 60 - —
ctns., l.c.l., works lb. .61 - —
125, 1,000 cps., ctns., c.l., works lb. .70 - —
ctns., l.c.l., works lb. .71 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .11 - —
cyls., l.c.l., Metropolitan area lb. .12½- .13¼
tanks, single units, works, frt. equald 100 lbs. 3.25 - —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs. 4.15 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 - 5.85
tanks, multiple units, 1 car, same basis⅝ 100 lbs. 6.25 - 7.25
Chloroacetic acid, mono, flake, 99%, purif., dms., c.l lb. .23½- .25½
dms., l.c.l. lb. .24½- —
tech., flake, 96-97%, dms., c.l., dms., l.c.l., frt. equald lb. .20 - —
frt. equald lb. .19 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld lb. 1.03 - —



The coating is crucial

Here is a medicament that must pass through the stomach and dissolve swiftly in the small intestine. The coating is a crucial matter.

It must be easy to apply by conventional means, soluble in organic solvents. It must provide a uniform skin of controllable thickness, must dry quickly without pinholes, and must resist abrasion in tumbling.

The film-forming substance that does these things is *Eastman C-A-P Cellulose Acetate Phthalate.* It performs predictably during coating and in the alimentary tract of the patient.

It steadfastly resists chemical action of the gastric juices and erosion from stomach motion. Tablets coated with *C-A-P* have shown no deterioration after seven days of continuous agitation in artificial gastric juice.

It disintegrates promptly in the small intestine, through hydrolytic action of the intestinal esterases. It works regardless of the rate of stomach emptying, and whether the intestinal environment is acid, alkaline, or neutral.

Eastman C-A-P Cellulose Acetate Phthalate is now available without patent license. For data, prices, and help on specific coating problems, write to ***Distillation Products Industries,*** Rochester 3, N. Y. Sales offices: New York and Chicago • W. M. Gillies, Inc., West Coast • Charles Albert Smith Limited, Montreal and Toronto.

"Eastman" is a trademark

DPi

Also . . . vitamins A and E . . . distilled monoglycerides . . . some 3800 Eastman Organic Chemicals for science and industry

Distillation Products Industries *is a division of* **Eastman Kodak Company**

4-Chloro-2-aminotoluene, fused, bbls. lb. 1.38 • —
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld lb. .66 • —
m-Chloroaniline, dms., c.l., frt. alld. lb. .75 • —
dms., l.c.l., same basis lb. .77 • —
tanks, same basis lb. .73 • —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 • —
dms., l.c.l., same basis lb. .54 • —
tanks, same basis lb. .50 • —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 • —
dms., l.c.l., same basis lb. .79 • —
o-Chlorobenzaldehyde, dms., t.l., works lb 1.05 • —
dms., l.t.l., same basis lb. 1.20 • —
p-Chlorobenzaldehyde, dms., l.c.l., works lb. 1.95 • —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 • —
fib. dms., smaller lots, works lb. 1.25 • —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 • —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 • —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 • —
dms., l.c.l., same basis lb. .19 • —
tanks, same basis lb. .17 • —
USP, dms., c.l., dlvd. lb. .27 • —
dms., l.c.l., dlvd. lb. .30 • —
tanks, minimum 4,000 gals. dlvd. lb. .25 • —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 • —
Powd., dlvd. E., 100% basis lb. .86½ • —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .86 • —
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld lb. .75 • —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .99 • —
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .17 • —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 • —
dms., l.c.l., same basis lb. .38 • —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 • —
dms., l.c.l., same basis lb. .38 • —
Chloropicrin, coml., cyls., 180 lbs., frt. alld lb. 1.07 • —
cyls., 100 lbs., same basis lb. 1.08 • —
cyls., 50 lbs., same basis lb. 1.14 • —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —

Chlorosulfonic acid, in stainless steel dms.½c. per lb. higher

o-Chlorotoluene, tech., dms., t.l., works lb. .37 • —
dms., l.c.l., t.l., same basis lb. .38 • —
Choline bitartrate, fib. dms., frt. adjusted kilo 2.75 - 3.00
Choline chloride, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Choline dihydrogen citrate, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Chrome green, CP, dark, light, medium blue content, 1-15%, bbls., dlvd. E. of Rockies. lb. .43 • —
blue content, 16-30%, bbls., same basis lb. .44 • —
medium blue content, 41-45%, bbls., same basis lb. .44 • —
blue content, 45-49%, bbls., same basis lb. .45 • —
Reduced color 25%, bbls., same basis lb. .20 • —

Chrome green prices 1c. higher W. of Rockies.

Chrome orange, CP, bbls., dlvd. E of Rockies lb. .35 • —

Chrome orange prices 1c. higher W. of Rockies.

Chrome yellow, CP, bbls., dlvd. E. of Rockies lb. .35 • —

Chrome yellow price 1c. higher W. of Rockies.

Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½ - —
dms., t.c.l., dlvd. N. Y. Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works. lb. .10 • —
Chromium fluoride, bbls., works lb. .51 • .52
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld. lb. 1.20 -
Pure, bgs., c.l., frt. alld lb. .44½ - —
bgs., l.c.l., same basis lb. .45¼ - —
Chromium trioxide, NF, bots lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs lb .25 • —
NF, yellow broken, bgs lb. .35 • .40
Cinnamic acid, refd., bots lb. 2.50 - 3.50
Cinnamic alcohol, bots. lb. 1.60 - 1.75
Cinnamic aldehyde, dms. lb. .80 - 1.00
Cinnamon, Ceylon, No. 2, bgs lb. .56 • —
Ceylon, No. '0000,' bgs lb. .76 • —
Cinnamon bark oil, bots lb. 36.00 -70.00
Cinnamon leaf oil, crude, dms lb. 1.60 - 2.00
USP. (Cassia), cns., dms lb. 8.50 -13.50
Citral, CP, bots. lb. 3.60 - 4.00
Extra, bots. lb. 3.60 - 5.00
Syn., dms. lb. 7.25 - 7.40
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l lb. .29½ - .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½ - .31
Citric acid, USP, hydrous, fine gran., bgs., dms., c.l lb. .27½ - .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28½
bgs., dms., smaller lots lb. .29 - .29½

Powdered citric acid ½c. per lb. higher.

Citronella oil, Ceylon, dms lb. 1.00 • —
Java-type, dms. lb. .92 • —
Citronellal, bots., dms lb. 1.60 - 2.10
Citronellol, bots., dms lb. 1.90 - 2.50
Citronellol, synthetic, dms lb. 1.70 • —
Civet, artif., bots lb. 13.75 -15.00
Nat., bots. oz. 8.50 -15.00
Clay, ball., dom., airfloated, bgs., c.l., Tenn ton. 17.50 -21.50
crushed shed moisture, bulk, c.l., Tenn ton. 8.00 -11.00
imp., airfloated, bgs., c.l., Atl. port net-ton 42.00 -45.75
lump, bulk, Atl. port net-ton 29.50 -35.75
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works. ton. 10.00 -12.00
Georgia, bgs., l.c.l., works. ton. 15.50 • —
dom., airfloated, 99%, 300 mesh bgs., c.l., Georgia, works. ton. 13.50 -14.50
bgs., l.c.l., ex-whse ton. 35.00 -36.00
imp., white, lump, bulk, c.l. ex-dock, Philadelphia, Portland, Me long-ton. 20.00 -35.00
white, powd., bgs., c.l., ex dock. net-ton. 50.00 • —
bgs., l.c.l., ex whse net-ton. 60.00 -70.00
Cleaners naphtha, petroleum, 105°F Flash, tankcars, New Jersey and New York gal. 18 • —
Group 3 gal. .12875- —
Houston, Texas gal. .145 • —
140°F Flash, tankcars, New Jersey or New York gal. .205 • —
Group 3 gal. .154 • —
Houston, Texas gal. .17 • —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 • —
1,6, tech., solid, dms., frt. alld lb. .77 • —
1,7, tech., dms., frt. alld lb. 2.20 • —
Cloves, Madagascar, bgs lb. .37½ - —
Zanzibar, bgs. lb. .37 • —
Clove bud oil, USP, dms lb. 2.70 - 3.60
Clove leaf oil, crude, dms. lb. 1.25 • —
CMC, crude, 96.4% low or medium vis., bgs. or fib dms., 23,000 lbs., dlvd. E., 100% basis lb. .41½ - —
96.4% low, or medium vis., bgs. or fib. dms., less than 23,000 lbs., dlvd. E., 100% basis lb. .43½ - —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .41½ - —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½ - —
purif., high vis. (see Cellulose gum).
CMC, standard low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 • —
bgs., smaller lots, same basis. lb. .59 • —

CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.

Coaltar, crude, resale for soln., tanks, works gal. .17 • —
Refd., resale, indust., dms., c.l., ex whse gal. .35 • —
dms., l.c.l., ex whse gal. .39 • —
tanks, works gal. .20½ - —
Coaltar pitch, aluminum, bulk, works. ton. 44.00 • —
Carbon and indust., bulk, works. ton. 44.00 • —
Core, bulk works ton. 40.50 • —
Fiber, bulk works ton. 48.00 • —
Roofing, 140-155°F., Federal Specification RP-381 Type 1, Cobalt acetate, 23.7% Co., dms., dlvd lb. 1.04 • —
Cobalt blue, genuine, 250 lb. bbls., dlvd. E of Rockies lb. 4.90 • —

Cobalt blue prices 1c. higher W. of Rockies.

Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 • —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .93 • —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 2.05 • —
Cobalt linoleate, fused 8½% Co., dms lb. .71½ - —
Liq., 6% Co., dms lb. .57½ - —
Cobalt metal, 99% dms., f.o.b. carrier lb. 1.50 • —
Cobalt naphthenate, liq., 6% Co., dms., dlvd lb. .48¾ - —
Cobalt nitrate, 20.1% Co., bbls., dlvd, lb. .75 • —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd. E of Mississippi R. lb. 1.15 • —
70-71% Co. kgs., same basis lb. 1.12 • —

Cobalt oxide prices W. of Mississippi R. 3c. per pound higher.

Cobalt phosphate, powd., 32.1% Co., dms., dlvd lb. 1.35 • —
Cobalt resinate, fused, 3% Co., dms. lb. .33½ - —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb. .64 • —
Monohydrated, 33% Co., dms., dlvd lb. 1.09 • —
Cobalt tallate, 6% Co., dms., dlvd. lb. .44 • —
Cocaine, USP. cns., 100-oz. lots, f.o.b. works oz. 17.50 • —
Cocaine hydrochloride, cns., 100-oz. lots, f.o.b. works oz. 13.75 • —
Cocillana bark, bls lb. .18 • .20
Cocoa butter, bgs lb. .59 • .64
Coconut oil, crude, tanks, New York lb. .15¼ - —
tanks, Pac. coast lb. .13¾ - —
Refd., deodorized, dms. lb. .22 • .22½
Coconut oil acids, dist., dms. lb. .26½ - .29
tanks lb. .24 • —
Double dist. (stripped), dms lb. .27½ - .30
tanks lb. .25 • —
Cod oil, dms., spot lb. .08¾ - .08½
Codeine, NF, cns., 100-oz. lots oz. 13.25 • —
Codeine hydrochloride, cns., 100-oz. lots oz. 11.75 • —
Codeine phosphate, USP, cns., 100-oz. lots oz. 10.25 • —
Codeine sulfate, USP, cns., 100-oz. lots oz. 10.75 • —
Codliver oil, USP, dms gal. 1.40 • 1.70
Cohosh root, black, bls lb. .20 • .25
Blue, bls. lb. .20 • .25
Colchicine, USP, bots oz. 29.00 • —
Colchicum root, bls lb. .35 • .45
Colchicum seed, bgs lb. .75 • .80
Collodion, USP, dms lb. .32½ - —
USP flexible, dms lb. .34 • —
Colocynth pulp, bls. lb. .75 • —
Colombo root, bls lb. .16 • .18
Condurango bark, bls lb. .18 • .20
Congo copal gum, No. 1, bgs lb. .26 • .27
No. 2, bgs. lb. .23 • .25
No. 3, bgs. lb. .18 • .20
Copaiba balsam, cns., dms lb. .60 • .65
Copaiba oil, cns lb. 1.35 • 2.00
Copper acetate, bbls., c.l., works. lb. .53 • —
bbls., l.c.l., works lb. .54 • —
Copper carbonate, 55%, bgs., c.l., works lb. .3635- —
bgs., l.c.l., works lb. .3785- —
Copper chloride cupric, anhyd., dms., works lb. .45½ - .46
cryst., dihydrate, dms., works. lb. .31 • .31½
cryst., dried, dms., works lb. .39¼ - .39¾
Copper chloride, cuprous, dms., works lb. .4135- .4435
Copper cyanide, tech., dms., 20,000-lb. lots or more lb. .609 • —
dms., 1,000-lb. lots or more lb. .619 • —
dms., smaller lots lb. .639 • .65
Copper gluconate, dms lb. 3.20 • —
Copper hydrate, dry, dms., c.l., frt. E. of Miss lb. .53½ - —
dms., l.c.l., same basis lb. .54 • —
Copper metal, electrolytic, dlvd. Valley basis lb. .33 • .36
Copper naphthenate, liq., 8% Cu, dms, frt. alld lb. .26½ - —
Copper nitrate, tech., cryst., dms., works lb. .30¾ .32¾
Copper oleate, solid, 9% Cu, dms., works lb. .45 • —
Copper oxide, black, bbls., 100-5,000-lb lots, works lb. .49¼ - —
Copper oxide, red, 97%, USN Type 1, bbls., 100-5,000-lb. lots. lb. .50½ - —
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .48½ - —
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 • —
10% active quinolinolate, dms lb. 1.14 - 1.15
Copper résinate, precip., dms., frt. alld lb. .41½ - —
Copper sulfate, CP, gran., dms., works lb. .1885- —
Cryst., 99%, bgs., c.l., works. 100 lbs. 13.00 • —
bgs., l.c.l., works 100 lbs. 13.25 -15.75
Monohydrated, 35%, dms., c.l., works 100 lbs. 24.00 • —
dms., l.c.l., works 100 lbs. 24.75 • —
Tribasic, distributors, bgs., c.l., works 100 lbs. 29.60 • —
bgs., l.c.l., works 100 lbs. 31.10 • —
Copper undecylenate, dms lb 2.75 • —
Copra, Atl., Gulf ports, c.i.f ton. 187.50 • —
Pac. ports, c.i.f ton. 182.50 • —
Coriander oil, USP, bots. lb. 8.75 • —
Coriander seed, Moroccan, bgs lb. .09½ - —
Rumanian, bgs. lb. .07½ - —
Yugoslavian, bgs. lb. .08½ - —
Corn oil, crude, tanks, works lb. .11¾ - —
Foots (soapstock) acid 95% tanks, New York lb. .05¼ - —
Refd., salad, dms. lb. .1748- .1775
tanks lb. .1548- —
Corn oil acids, dist., dms. lb. .15¾ - .18¼
tanks lb. .1648- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.30 • —
paper bgs., l.c.l 100 lbs. 7.45 • —
Corn syrup, 42° Be., non-ret. dms., c.l 100 lbs. 7.31 • —
non-ret. dms., l.c.l 100 lbs. 7.46 • —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bots., kilo or more gram. 1.05 - 1.75
Costus oil, bots oz. 6.00 • —
Cottonseed meal, 41%, bgs. Memphis ton. 58.00 Nom.
Cottonseed oil, crude, tanks, South, East lb. .10⅜ Nom.
tanks, Valley lb. .10⅜ Nom.
tanks, Texas, Lubbock lb. .09¾ Nom.
tanks, Texas, Waco lb. .10 • —
Foots (soapstock), acid, 95%, tanks, New York lb. .03½ - —
Refd., salad, dms. lb. .15¼ - .15½
tanks lb. .13¼ - —
Cottonseed oil acids, dist., dms lb. .15¾ - .18¼
tanks lb. .13½ - —
Coumarin, NF, cryst., dms lb. 3.30 - 3.40
Cramp bark, NF, bls lb. .90 - 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots., cbys., lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 • —
Crude, soln. 80%, tanks, works. gal. .226 • —
Refd., dms., c.l., works gal. .50 • —
dms., l.c.l., same basis gal. .62 • —
tanks, same basis gal. .38 • —

West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.

Creosote, beechwood, cbys., dms., f.o.b. works, dlvd. in Metropolitan area lb. 1.72 - 1.77
Hardwood, NF, cbys., dms., same basis lb. 1.42 - 1.47
Pinewood, dms., incl., c.l., works. lb. .0561- —
dms., incl., l.c.l., works lb. .0634- —
dms., incl., l.c.l., ex whse, New York lb. .0745- —
tanks, works lb. .0460- —
Creosote oil (see Creosote coaltar).
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16¼ - —
non-ret. dms., l.c.l., same basis lb. .17½ - —
tanks, same basis lb. .145 • —
Cresol, USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., same basis lb. .18 • —
non-ret. dms., l.c.l., same basis. lb. .19 • —
tanks, same basis lb. .16 • —
m-Cresol, 95-98%, dms., c.l., works. lb. .60 • —
dms., l.c.l., works lb. .61 • —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 • —
dms., l.c.l., same basis lb. .19 • —
tanks, same basis lb. .16 • —
2.97% 2°C., dms., c.l., frt. equald. lb. .22 • —
dms., l.c.l., same basis lb. .23 • —
tanks, same basis lb. .20 • —
o-Cresol, 30.5°C. m.p. and over, ret., dms., c.l., frt. equald lb. .17 • —
ret. dms., l.c.l., same basis lb. .18 • —
tanks, same basis lb. .15 • —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½ - —
ret. dms., l.c.l., same basis lb. .17½ - —
tanks, same basis lb. .14½ - —
o-Cresol, 30.5°C. m.p. and over, ret. o-Cresol, 29°-29.9° C. m.p., dms., c.l., frt. equald lb. .16 • —
ret. dms., l.c.l., same basis lb. .17 • —
tanks, same basis lb. .14 • —
25°-28°C. m.p., dms., c.l., frt. equald lb. .15 • —
ret. dms., l.c.l., same basis lb. .16 • —
tanks, same basis lb. .13 • —
p-Cresol, 98%, dms., c.l., dlvd lb. .52 • —
dms., l.c.l., dlvd lb. .53 • —
tanks, dlvd. lb. .49 • —
2,3-Cresotic acid, dms., ton lots, works lb. .70 • —
dms., smaller lots, works lb. .72 • —
p-Cresyl methyl ether, cns lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., metapara content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt. equald gal. 1.35 • —
dms., l.c.l., same basis gal. 1.40 • —
tanks, same basis gal. 1.15 • —
metapara content 25% or less, dms., c.l., t.l., same basis gal. 1.20 • —
dms., l.c.l., same basis gal. 1.25 • —
tanks, frt. equald gal. 1.00 • —
Cresylic acid, coaltar, imp., metapara content 25% or less, f.o.b. works, frt. equald, to competitive points, 50 dms. or more, gal. 1.03½ - —
less than 50 dms., same basis gal. 1.05 - 1.15
tanks, same basis gal. 1.00 • —
Crotonaldehyde, 91-93%, dms., l.c.l, works lb. .25 • —
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd lb. .36 • —
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 • —
bgs., l.c.l., works 100 lbs. 14.25 • —
Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 • —
bgs., l.t.l., works lb. .22 • —
Cubeb berries, NF, bgs lb. 1.00 • —
Powd., cs. lb. 1.15 • —
Cubeb oil, cns lb. 12.00 -16.00
Cumene, dms., c.l., works lb. .12 • —
dms., l.c.l., works lb. .14 • —
tanks, works lb. .11 • —
Cumin seed, Iranian, bgs lb. .23 • —
Moroccan, bgs. lb. .31 • —
Turkish, bgs. lb. .27 • —
Cumin seed oil, bots., cns lb. 15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract. ton. 57.00 • —
Fertilizer, pulv., 21% N, bgs., works unit-ton. 2.85 • —
Cyanamide, fertilizer, indust. grade, bgs, c.l., works ton. 75.00 • —
bgs., l.c.l., works ton. 96.00 • —
Indust. grade, 6-16 mesh, dms., c.l., works ton. 120.00 • —
dms., t.c.l., works ton. 140.00 • —
Cyclohexane, 99% tech., dms., c.l., dlvd. E of Rockies gal. 1.02 • —
dms., l.c.l., same basis gal. 1.10 • —
dms., c.l., dlvd. W of Rockies gal. .77 • —
dms., l.c.l., same basis gal. .85 • —
tanks, works gal. .55 • —
98%, tech., 40-dm. lots or more, f.o.b. works gal. .56 • —
5-39 dms., same basis gal. .60 • —
tanks, same basis gal. .36 • —
Cyclohexanol, tech., dms., c.l., works, frt. alld. E lb. .28½ - —
dms., l.c.l., works, same basis. lb. .29½ - —
tanks, works, same basis lb. .26 • —
Cyclohexanone, tech., dms., c.l., works lb. .33½ - —
dms., l.c.l., works lb. .34½ - —
tanks, works lb. .31 • —
Cyclohexylamine, dms., c.l., works. lb. .49 • —
dms., l.c.l., works lb. .50 • —
tanks, works lb. .47 • —
Cypress oil, bots. lb. 5.30 • —

D

2,4-D, tech., bgs., dms., c.l., works, frt. equald lb. .40 • —
bgs., dms., l.c.l., same basis lb. .45 • .49
2,4-D butyl ester, dms., c.l., works. lb. .43 • —
dms., l.c.l., same basis lb. .48 • .52
tanks, same basis lb. .42 • —
2,4-D isopropyl ester, dms., c.l., works lb. .43 • —
dms., l.c.l., works lb. .48 • .52
tanks, works lb. .42 • —
Dammar gum, Batavia, A E, cs lb. No stocks.
East India, Batu, bold, bgs lb. .15½ - .18
nubs and chips, bgs. lb. .09 • .10
black, bold, bgs lb. .15½ - .18
nubs and chips, bgs. lb. .12¼ - .13¼
unscraped, bgs. lb. .13 • .14½
pale, chips, bgs. lb. .15 • .17
pale, nubs, bgs. lb. .20¾ - .24
Siam, cs. lb. .31½ - .34
Singapore, No. 1, bgs. lb. .34 • .40
No. 2, bgs. lb. .29 • .32
No. 3, bgs. lb. No stocks.
dust, bgs. lb. .18 • .20
Dandelion root, bls lb. .35 • .40
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 • .47
fib. dms., l.c.l., works lb. .46 • .48
DDT, flake or lump, bgs., c.l., dlvd lb. .23 • —
bgs., smaller lots, same basis. lb. .25 • —
fib. dms., c.l., same basis lb. .24 • —
fib. dms., smaller lots, same basis lb. .26 • —

Powdered DDT 1c. per pound higher.

DDVP (see Dimethyl dichlorovinyl phosphate).
l-Decanol, tech., dms., c.l., dlvd. E. lb. .43½ - —
dms., l.c.l., dlvd. E. lb. .45½ - —
tanks, dlvd. E. lb. .41 • —
Decyl alcohol, mixed isomers, dms., c.l., dlvd. lb. .23½ - —
dms., l.c.l., dlvd. lb. .25 • —
tanks, dlvd. lb. .21 • —
Perfume grade, bots. lb. 1.00 - 2.00
Decyl alcohol, normal (see l-Decanol).
Deertongue leaves, bls. lb. .55 • .60
Defluorinated phosphate, feed grade, 14% P, paper bgs., c.l., t.l., Tupelo, Miss. ton. 57.07 • —
18% P, paper bgs., c.l., works. ton. 66.25 -71.80
19% P, paper bgs., c.l., t.l., works, Houston, Tex. ton. 74.35 • —

Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.

Degras, common (15-17% free fatty acid), 400-lb. dms lb. .12 • .14
Neutral (over 2% free fatty acid), 400-lb. dms lb. 13 • —
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E. of Rockies. gal. .69½ - —
dms., l.c.l., same basis gal. .74½ - .80½
tanks, dlvd., same basis gal. .53½ - —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies. gal. .72 • —
dms., l.c.l., same basis gal. .77 • .83
tanks, same basis gal. .56 • —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies gal. .70½ - —
dms., l.c.l., same basis gal. .75½ - .81½
tanks, same basis gal. .54½ - —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .69 • —
dms., l.c.l., same basis gal. .74 • .80
tanks, same basis gal. .53 • —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .68 • —
dms., l.c.l., same basis gal. .73 • .79
tanks, same basis gal. .52 • —
Denatured alcohol, ethyl, SD23A, dms., c.l., dlvd. E. of Rockies gal. .70½ - —
dms., l.c.l., same basis gal. .75½ - .81½
tanks, same basis gal. .54½ - —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., l.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
Denatured alcohol, SD29, dms., c.l., dlvd. E. of Rockies gal. .69½ - —
dms., l.c.l., same basis gal. .74½ - .80½
tanks, same basis gal. .53½ - —
SD30, dms., c.l., dlvd. E. of Rockies gal. .68 • —
dms., l.c.l., same basis gal. .73 • .79
tanks, same basis gal. .52 • —

Now on Stream...

CITRIC ACID
from BZURA

Bzura is now "on stream"... and producing pure Citric Acid, U.S.P. from the most basic carbohydrate source . . . cane blackstrap molasses . . . via a new and exclusive deep fermentation process.

Months of developmental and experimental work in advanced fermentation techniques have succeeded in unlocking the secrets which now result in the rapid commercial production of Citric Acid, U.S.P. — Citric Acid, in unlimited supply, produced through Bzura technical achievement to satisfy the highest purity and mesh requirements standardized by the food, drug and beverage fields and other allied industries.

Write today for informative literature which describes our company and our products. It will help us become better acquainted.

FERMENTATION B CHEMICALS

BZURA CHEMICAL COMPANY INC.

Keyport, New Jersey / Plant: Fieldsboro, New Jersey

Denatured Alcohol—Ethyl Acetate

Denatured alcohol, ethyl, SD-35A, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., l.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
SD-40, dms., c.l., dlvd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —

For anhyd. alcohol on above formulas prices are 7c. per gal. higher.

West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.

d-Desoxyephedrine hydrochloride, dms lb. 15.00 -17.00

dl-Desoxyephedrine hydrochloride, dms lb. 6.50 • —

Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.38 • —
paper bgs., l.c.l. 100 lbs. 9.53 • —
canary dark, paper bgs., c.l. 100 lbs. 9.22 • —
paper bgs., l.c.l. 100 lbs. 9.37 • —
indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.12 • —
paper bgs., l.c.l. 100 lbs. 9.27 • —
white, paper bgs., c.l. 100 lbs. 8.96 • —
paper bgs., l.c.l. 100 lbs. 9.11 • —

Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.

Dextrose, anhyd., comi., bgs., c.l. 100 lbs. 8.65 • —
bgs., l.c.l. 100 lbs. 8.80 • —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs. 14.70 • —
100-lb. dms. 100 lbs. 15.20 • —
Hydrated, comi., bgs., c.l., ex whse 100 lbs. 7.45 • —
bgs., c.l., ex whse 100 lbs. 7.60 • —
USP, dms. lb. .19¾- —

Diacetone alcohol, acetone-free, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd. lb. .17 • —
tanks, dlvd. lb. .13 • —
Tech., dms., c.l., dlvd. lb. .15 • —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —
Diacetyl, flavor grade, bots. lb. 4.30 - 4.55
Di-sec-amyl phenol, dms., c.l., works lb. .32 • —
dms., l.c.l., works lb. .33 • —
tanks, works lb. .29½- —
Di-tert-amyl phenol, dms., c.l., works lb. .32 • —
dms., l.c.l., works lb. .33 • —
tanks, works lb. .29½- —
Diallylamine, dms., c.l., dlvd. lb. .98½- —
dms., l.c.l., dlvd. lb. 1.00 • —
tanks, dlvd. lb. .96 • —
o-Dianisidine, dry, tech., fib. dms. lb. 2.00 • —
Dibenzyl sebacate, dms., c.l., works. lb. .93 • —
dms., l.c.l., same basis lb. .94 • —
tanks, same basis lb. .91 • —
Dibromobenzene, bgs., 500-lb. lots. lb. .55 • —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd. lb. .65 • —
l.t.l., dms., same basis lb. .68 • —
Food grade, c.l., t.l., dms., dlvd. lb. .65 • —
dms., l.t.l., same basis lb. .68 - 1.10
Tech., dms., c.l., t.l., dlvd. lb. .57 • —
dms., l.c.l., same basis lb. .60 • —
tanks, same basis lb. .54 • —
Dibutyl fumarate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E lb. .33 • —
tanks, dlvd E lb. .29 • —
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E lb. .33 • —
tanks, dlvd. E lb. .29 • —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .31 • —
dms., l.c.l., same basis lb. .32½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 • —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
Dibutyl sebacate, dms., c.l., works. lb. .67½- —
dms., l.c.l., works lb. .68½- —
tanks, works lb. .65½- —
Dibutyl tartrate, dms., works, frt. alld lb. .65½- —
Dibutylamine, dms., c.l., dlvd lb. .55½- —
dms., l.c.l., same basis lb. .57 • —
tanks, same basis lb. .53 • —
Dicapryl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd. lb. .29 • —
tanks, dlvd. lb. .25 • —
Dicapryl sebacate, dms., c.l., works. lb. .63 • —
dms., l.c.l., works lb. .63½- .64
tanks, works lb. .61 • —
2,5-Dichloroaniline, dms., works lb. .83 • —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld lb. .73 • —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾- —
dms., l.c.l., same basis lb. .13¾- —
tanks, same basis lb. .11 • —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb. .12 • —
dms., 2,000 lbs. or more same basis lb. .14½- —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½- —
dms., l.c.l., or l.t.l., works lb. .34 • —
tanks, works lb. .32 • —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E lb. .15½- —
dms., l.c.l., l.t.l., same basis lb. .17 • —
tanks, same basis lb. .13 • —
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 • —
dms., l.c.l., same basis lb. .75 • —
Dichloropentanes, dist., dms., c.l., works lb. .05 • —
dms., l.c.l., works lb. .06 • —
tanks, works lb. .03 • —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine, dms., c.l., works. lb. .54 • —
dms., l.c.l., works lb. .55 • —
tanks, works lb. .52 • —
Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt. alld. lb. .46½- —
fib. dms., l.c.l., same basis lb. .48 • —
Dicyclopentadiene, dms., c.l., f.o.b. works lb. .14½- —
dms., l.c.l., same basis lb. .14¾- —
tanks, same basis lb. .13 • —
Didecyl phthalate, dms., c.l., works. lb. .28¼- —
dms., l.c.l., same basis lb. .30 • —
tankcars, tanktrucks, 2,000 gals. lb. .26 • —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —

Dieldrin, dms., c.l., dlvd. lb. 1.85 • —
dms., l.c.l. dlvd. lb. 1.90 • —
Diethanolamine, dms., c.l., dlvd. E. lb. .27 • —
dms., l.c.l., same basis lb. .28½- —
tanks, same basis lb. .24½- —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½- —
dms., l.t.l., frt. alld. lb. .28½- —
tanks, frt. alld. lb. .26½- —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate, dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., same basis lb. .48½- —
tanks, same basis lb. .45 • —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½- —
dms., l.c.l., dlvd. lb. .71 • —
tanks, dlvd. lb. .67 • —
Diethyl oxalate, dms., c.l., f.o.b. works lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 • —
Diethyl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd. lb. .29 • —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
tankcars, tanktrucks, 2,000-lb. lots, same basis lb. .26 • —
Diethyl sulfate, dms., c.l., works lb. .19½- —
dms., l.c.l., works lb. .20¼- —
tanks, works lb. .17½- —
Diethyl thiourea, dms., c.l., t.l., works lb. .58 • —
dms., l.c.l., same basis lb. .59 • —
Diethyl toluamide, 90-95% meta isomer dms., c.l., t.l., works. lb. 2.30 • —
5-44 dm. lots, works lb. 2.35 • —
1-4 dm. lots, works lb. 2.40 • —
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 • —
Diethylamine, dms., c.l., dlvd E lb. .52 • —
dms., l.c.l., same basis lb. .53½- —
tanks, same basis lb. .49½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 • —
dms., l.c.l., same basis lb. .58 • —
tanks, same basis lb. .55 • —
Diethylbenzene, dms., t.l., frt. alld. lb. .16½- —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l., dlvd. E. lb. .17¾- —
dms., l.c.l., same basis lb. .19¼- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms., l.c.l., works lb. .52¼- —
Diethylene glycol monobutyl ether, c.l., dms., works lb. .30¾- —
dms., l.c.l., works lb. .32¼- —
tanks, dlvd. E. lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works. lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, dlvd. E. lb. .28¾- —
Diethylene glycol monoethyl ether, dms., c.l., dlvd lb. .22½- —
dms., l.c.l., dlvd. lb. .24 • —
tanks, dlvd. E. lb. .20 • —
Diethylene glycol monoethyl ether acetate, dms., c.l., works. lb. .27¼- —
dms., l.c.l., works lb. .28 • —
tanks, works lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., dlvd lb. .21 • —
dms., l.c.l., dlvd. lb. .22½- —
tanks, dlvd. E. lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd. E lb. .44 • —
dms., l.c.l., dlvd. E. lb. .45½- —
tanks, dlvd. E. lb. .41½- —
Diethylstilbesterol, USP, bots., 10-kilo lots kilo. 100.00 -147.50
bots, 1-kilo lot kilo. 110.00 -152.50
Digitalis leaves, USP, dom., dms lb. 1.25 • —
Digitoxin, USP, bots. gram. 4.20 • —
Diglycol laurate, dms. lb. .32¾- .34
Diglycol stearate, dms., ton lots lb. .26 • .28
Diglycolic acid, bgs., c.l., t.l., works. lb. .15½- —
bgs., l.c.l., works lb. .16 • —
Dihexyl sebacate, dms., c.l., works. lb. .66 • —
dms., l.c.l., works lb. .67 • —
tanks, works lb. .64 • —
Dihydrazine sulfate, dms., works lb. 1.10 - 1.25
Dihydrostreptomycin sulfate, bulk. gram. .035 - .036
1,2-Dihydroxy anthraquinone, dms., works lb. 3.45 • —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 • —
Tech., dms., 20,000 lbs. or more lb. 1.11 • —
dms., 1,050 lbs. to 20,000 lbs. lb. 1.13 • —
dms., 150 lbs. to 1,050 lbs. lb. 1.15 • —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 • —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Di-isobutyl phthalate, dms., c.l., dlvd. E. lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks, same basis lb. .29 • —
Di-isobutylene, dms., c.l., dlvd. E lb. .10 • —
dms., l.c.l., dlvd. E lb. .11½- —
tanks, dlvd. E. lb. .08 • —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .28½- —
dms., l.c.l., same basis lb. .30 • —
tanktrucks, 1,000-1,999 gals., dlvd. lb. .26½- —
tankcars, tanktrucks, 2,000 gals., dlvd lb. .26 • —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 • —
dms., l.c.l., works lb. .62½- .63
tanks, works lb. .60 • —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼- —
dms., l.c.l., same basis lb. .24¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., dlvd. E. of Rockies lb. .50½- —
dms., l.c.l., same basis lb. .52 • —
tanks, same basis lb. .48 • —
Dillweed oil, dom., bots., dms lb. 3.75 • —
Dimethyl anthranilate, cns. lb. 4.15 • —
Dimethyl dichlorovinyl phosphate, 55-gal. dms., dlvd lb. 3.50 • —
Dimethyl ethanolamines, anhyd., dms., c.l. dlvd lb. 1.225 • —
dms., l.c.l., dlvd. lb. 1.235 • —
tanks, dlvd. lb. 1.20 • —
70% dms., c.l., dlvd., 100% basis, contained amines lb. .68¼- —
dms., l.c.l., dlvd., 100% basis. lb. .69½- —
tanks, dlvd., 100% basis lb. .66 • —

Dimethyl hydroquinone, dms. lb. 1.90 - 2.20
Dimethyl phthalate, dms., c.l., works lb. .28½- —
dms., l.c.l., works lb. .30 • —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 • —
Dimethyl sebacate, dms., c.l., works. lb. 1.31 • —
dms., l.c.l., works lb. 1.30 • —
tanks, works lb. 1.28 • —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., l.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms., c.l., works. lb. .18 • —
dms., l.c.l., works lb. .18½- —
tanks, works lb. .15 • —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 • —
dms., l.c.l., frt. equald, 100% basis lb. .38¼- —
tanks, frt. equald, 100% basis. lb. .28 • —
40% soln., dms., c.l., frt. equald, 100% basis lb. .35 • —
dms., l.c.l., frt. equald, 100% basis lb. .35¼- —
tanks, frt. equald, 100% basis. lb. .28 • —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 • —
dms., l.c.l., same basis lb. .29 • —
tanks, same basis lb. .26 • —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½- —
dms., l.c.l., works lb. .33 • .34
tanks, works lb. .30 • —
2,4-Dinitroaniline, dms., frt. alld lb. .75 • —
Dinitroaniline orange toner, CP, bbls., dlvd. E. of Rockies. lb. 1.56 • —

Dinitroaniline orange toner prices 1c higher W. of Rockies.

m-Dinitrobenzene, 89°C., dms. lb. .26 • —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E lb. .17¼- —
dms., l.c.l., frt. alld. E. lb. .17¾- —
tanks, frt. alld. E. lb. .17 • —
2,4-Dinitrophenol, bbls. lb. .41 • —
2,4-Dinitrotoluene, oil, dms. lb. .11 • —
Refd., 63°C., dms. lb. .23 • —
Dioctyl adipate, dms., c.l., works lb. .42½- —
dms., l.c.l., works lb. .43½- —
tanks, works lb. .40 • —
Dioctyl phthalate, dms., c.l., frt. alld lb. .28½- —
dms., l.c.l., frt. alld lb. .30 • —
tanktrucks, 1,000-1,999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 • —
Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
dms., l.c.l., works lb. .62¼ —
tanks, works, dlvd. lb. .59¼- —
1,4-Dioxane, dms., c.l., dlvd. E lb. .31½- —
dms., l.c.l., dlvd. E lb. .33 • —
tanks, dlvd. E. lb. .29 • —
Prices in the west are 2c. per lb. higher.
Dipentaerythritol, bgs., c.l., t.l., dlvd. E lb. .40 • —
bgs., l.c.l., l.t.l., dlvd. E. lb. .41 • —
Dipentene, dest.-dist., dms., c.l., works gal. .58 • —
dms., l.c.l., works lb. .62 • —
dms., l.c.l., ex whse. gal. .78 • —
tankscars, works gal. .41 • —
Steam dist., dms., c.l., works, South gal. .72 • —
dms., l.c.l., dlvd. New York gal. .91 • —
tanks, works, South lb. .55 • —
Dip oil (see Tar acid oil).
Diphenolic acid, 1,000-lb. or more, bgs., works lb. .75 • —
Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb. 1.00 • —
Diphenyl, bgs., c.l., t.l., works lb. .16¾- —
bgs., l.c.l., works lb. .18½- —
tanks, works lb. .15¾- —
Diphenyl oxide, perfume grade, cns. lb. .55 • .70
Diphenyl phthalate, dms., c.l., works. lb. .51¾- —
dms., l.c.l., works lb. .53¾- —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .31 • —
bgs., l.c.l., same basis lb. .33 • —
Refd., fused, tanks, same basis lb. .28 • —

Refd., diphenylamine in dms., ½c. per lb. higher.

Diphenylguanadine, bgs., dms., ton lots, frt. alld. lb. .49 • —
bgs., smaller lots, frt. alld lb. .50 • —
Diphenylhydantoin-sodium, USP, dms lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17 • —
dms., l.c.l., frt. alld. lb. .18½- —
tanks, frt. alld. lb. .14¼- —
Dipropylene glycol methyl ether, dms., c.l., dlvd. E lb. .20 • —
dms., l.c.l., same basis lb. .21½- —
tanks, same basis lb. .18½- —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.45 • —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .69 • —
dms., smaller lots, frt. alld lb. .70 • —
Di-o-tolylithiourea, tech., solid, dms., c.l., t.l., frt. alld lb. .55 • —
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald lb. .20 • —
dms., l.c.l., same basis lb. .21 • —
tanks, same basis lb. .19 • —
50-60%, dms., c.l., works, 100% basis lb. 1.00 • —
dms., l.c.l., works, 100% basis. lb. 1.05 • —
tanks, same basis lb. .90 • —
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd. E lb. .75 • —
dms., l.c.l., l.t.l., same basis lb. .76 • —
Dodecylbenzene, dms., c.l., f.o.b., works, frt equald lb. .134 • —
dms., l.c.l., same basis lb. .144 • —
tanks, same basis lb. .11 • —
Dodecylphenol, c.l., frt. alld. lb. .22 • —
dms., l.c.l., same basis lb. .23 • —
tanks, same basis lb. .19½- —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd.:
Blue, FD&C, No. 1 lb. 15.65 -17.60
No. 2 lb. 15.65 -17.60
Green, FD&C, No. 1 lb. 15.65 -17.60
No. 2 lb. 19.60 -22.85
No. 3 lb. 31.30 -35.90
Red, FD&C, No. 1 lb. 5.90 - 7.85
No. 2 lb. 3.30 - 4.10
No. 3 lb. 19.60 -22.85
No. 4 lb. 5.55 - 7.50
Violet, FD&C, No. 1 lb. 15.65 -17.60
Yellow, FD&C, No. 1 lb. 9.15 -11.05
No. 5 lb. 3.30 - 4.10
No. 6 lb. 3.30 - 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:
Black, D&C, No. 1 lb. 10.50 -10.95
Brown, D&C, No. 1 lb. 15.65 -16.10
Green, D&C, No. 5 lb. 15.65 -16.10
No. 6 lb. 15.65 -16.10
No. 7 lb. 14.35 -14.80
Orange, D&C, No. 3 lb. 10.50 -10.95
No. 4 lb. 19.60 -20.05
No. 5 lb. 3.80 - 4.25
Red, D&C, No. 17 lb. 10.50 -10.95
No. 18 lb. 23.60 -24.00
No. 19 lb. 15.00 -15.45
No. 21 lb 3.90 - 4.35
No. 22 lb. 10.50 -10.95
No. 28 lb. 24.15 -24.65
No 33 lb. 17.00 -17.45
Violet, D&C, No. 2 lb. 15.65 -16.10
Yellow, D&C, No. 7 lb. 10.50 -10.95
No. 8 lb. 10.50 -10.95
No. 10 lb. 13.05 -13.50
No 11 lb. 13.05 -13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots, dlvd.:
Blue, Ext., D&C, No. 1 lb. 15.65 -16.10
Green, Ext., D&C, No. 1 lb. 15.65 -16.10
Red, Ext., D&C, No. 1 lb. 13.05 -13.50
Yellow, Ext, D&C, No. 1 lb. 10.50 -10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd. No.
11110 Brilliant scarlet BN lb. 1.79 • —
13390 Fast blue SR lb. 1.43 • —
14025 Yellow 2G lb. 1.26 • —
14030 Orange R, extra, conc. lb. 1.64 • —
14645 Chrome black T lb. .77 • —
14720 Rubine XX, conc. lb. 1.59 • —
15510 Orange Y, extra conc. lb. .83 • —
15575 Orange RR lb. .99 • —
15620 Fast Red A, conc lb. 1.61 • —
15705 Chrome blue black R, conc. lb. 1.12 • —
16150 Scarlet 2RL lb. 1.22 • —
16255 Brilliant scarlet 3RN, conc. lb. 1.26 • —
16230 Fast light, orange 2G lb. 1.39 • —
17590 Brown PG lb. 3.00 • —
18050 Phloxine 2G lb. 1.05 • —
18055 Fuchsine 6B lb. 1.55 • —
18965 Fast yellow 2G lb. 2.32 • —
19140 Yellow XX lb. 2.48 • —
19555 Yellow NN, conc. lb. 3.67 • —
20170 Brown Y lb. 1.33 • —
20470 Blue black, extra, conc. lb. 1.44 • —
21010 Brown, RX, conc. lb. 1.35 • —
22240 Scarlet B lb. 2.81 • —
22310 Red FC lb. 1.57 • —
22311 Brown MCW lb. 1.47 • —
22610 Blue 2B, extra conc. lb. 1.53 • —
23500 Red, 4BX, conc. lb. 1.80 • —
24410 Sky blue FF, extra, conc. lb. 1.95 • —
24895 Brilliant yellow, conc. lb. 3.27 • —
26360 Navy blue 3R, conc. lb. 1.84 • —
26695 Black F, conc. lb. 2.30 • —
26900 Milling Red 3R, conc lb. 2.24 • —
27075 Neutral black 2B, conc lb. 2.75 • —
27720 Gray L lb. 2.18 • —
29185 Fast scarlet 4BNC lb. 2.23 • —
30015 Diazo black VJ conc. lb. 2.48 • —
30045 Yellow brown K, extra lb. 1.26 • —
30235 Black EB, 200% lb. 1.33 • —
30295 Green BY, conc. lb. 1.07 • —
35660 Brown B lb. 2.89 • —
37565 Naphthol SWF lb. 1.85 • —
40000 Yellow 2G lb. 1.44 • —
41000 Yellow OX lb. 2.45 • —
42000 Green V, crystals lb. 2.73 • —
42040 Brilliant green G crystals lb. 3.62 • —
42090 Blue EG lb. 1.85 • —
42100 Milling green 6B, conc. lb. 4.78 • —
42640 Violet 4BXN lb. 2.43 • —
43830 Brilliant blue, BBG lb. 2.44 • —
44045 Blue B, extra conc. lb. 3.61 • —
45170 Red BX lb. 4.76 • —
50415 Nigrosine SSJ lb. 1.03 • —
52015 Blue GXX lb. 2.33 • —
58005 Alizarin red SC lb. 3.64 • —
59700 Golden orange GFD, single paste lb. 2.70 • —
59710 Flaming orange 6RD double powder lb. 4.90 • —
59800 Dark blue BO, single paste. lb. 2.28 • —
59825 Jade green NC supra, double paste lb. 1.50 • —
61570 Alizarin green CG, extra lb. 3.81 • —
63010 Alizarin blue SAPG lb. 3.90 • —
63615 Alizarin blue black B lb. 3.26 • —
69825 Blue BLFD double paste lb. 2.82 • —
70800 Brown BR single paste lb. 2.03 • —

Dyes, coaltar, oil-soluble, 100-lb. drums, dlvd. No.
12140 Oil scarlet BL lb. 1.87 • —
12055 Oil orange 7078 V lb. 1.38 • —
26120 Oil red N 1700 lb. 1.94 • —
42535B Methyl violet base lb. 1.88 • —
44045B Victoria blue base lb. 4.06 • —
50415B Oil black 8603 lb. .80 • —
61565 Alizarin cyanine green base. lb. 6.13 • —
Spirit black RB lb. 3.89 • —
Spirit brown GN lb. 5.30 • —
Spirit orange R conc. lb. 5.87 • —
Spirit red B conc lb. 6.41 • —
Pr. 517 Spirit yellow 2R conc. lb. 4.62 • —
Pr. 554 Spirit blue THN lb. 5.06 • —

E

Echinacea root, bls. lb. 1.25 • —
Elm bark, grinding, bls. lb. .30 • .32
Powd., bbls., bxs lb. .60 • —
Select, bundles lb. .75 • —
Emetine hydrochloride, USP, bots. oz. 48.40 • —
Endrin, tech., dms., 100-lbs. or more, 100% basis, dlvd lb. 2.70 • —
Eosin red toner, bbls., works lb. 1.95 • —
Ephedrine, syn., USP, anhyd., bots. 100-oz. lots oz. .88 • 1.00
hydrous, bots., 100-oz. lots, oz. .92 • —
Ephedrine hydrochloride, NF, dms., 100-oz. f.o.b. works oz. .72 • —
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b. works oz. .73 • —
USP, powd., dms., 100-oz., same basis oz. .73 • —
Epichlorohydrin, dms., c.l., dlvd lb. .29½- —
dms., l.c.l., dlvd. lb. .31 • —
tanks, dlvd. lb. .27 • —
l-Epinephrine base, syn., USP, bots., 100 gram lots gram. .58 • —
Epsom salt (see Magnesium sulfate).
Erigeron oil, cns. lb. 11.00 • —
Ergot, NF, dms., tin-lined lb. 1.00 • 1.25
Eserine salicylate, bots. oz. 44.00 • —
Eserine sulfate, bots. oz. 36.00 • —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va. lb. .18½- —
Wood-rosin type, dms., c.l., same basis lb. .18½- —
Ether (see specific product).
Ethyl acetate, nat., ferment. 85-88%, dms., c.l., dlvd lb. .13 • —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —
85-98%, dms., c.l., dlvd. lb. .15¼- —
dms., l.c.l., dlvd. lb. .16¾- —
tanks, dlvd. lb. .13¾- —

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Ethyl Acetate—Fleaseed

Ethyl acetate, nat., ferment, 99%, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd. lb. .17 - —
tanks, dlvd. lb. .13 - —
syn., 85-88%, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —

Ethyl acetate, syn., 95-98%, dms., c.l., dlvd lb. .15¼- —
dms., l.c.l., dlvd lb. .16¾ —
tanks dlvd lb. .12¾- —
99%, dms. c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd. lb. .17 - —
tanks dlvd. lb. .13 - —

Ethyl acetoacetate, dms., c.l., dlvd. lb. 58½- —
dms., l.c.l., dlvd. lb. .60 - —
tanks, dlvd lb. .56 - —

Ethyl acrylate, dms., c.l., t.l., dlvd. lb. .36 - —
dms., l.t.l., dlvd. lb. .37 - —
tanks, dlvd lb. .34 - —

Ethyl alcohol, 190 pf., USP, tax paid dms, c.l., dlvd. E. of Rockies gal.20.63 - —
dms., l.c.l., same basis gal..20.73 -20.84

Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E of Rockies gal. .68 - —
dms., l.c.l., same basis gal. .78 - .89
tanks, same basis gal. .52 - —

Ethyl alcohol, absolute, 200 pf., tax paid, dms., dlvd. E. of Rockies gal. 21 75 - —
dms., l.c.l., same basis gal.21.85 -21.96
tanks, same basis gal.21.59 - —

Ethyl alcohol, denatured (see Denatured alcohol, ethyl).

Ethyl aminobenzoate, USP (see Benzocaine).

Ethyl amyl ketone, dms., c.l., dlvd. lb. .20 - —
dms., l.c.l. same basis lb. .21½- —
tanks, same basis lb. .17½- —

Ethyl benzoate, bots. lb. .75 - 1.00

Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E lb. .43 - —
dms., l.c.l., frt. alld. E lb. .45 - —
tanks, frt. alld E lb. .41 - —

Ethyl butyl ketone, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., t.l. works lb. .36¾- —
tanks, works lb. .34 - —

Ethyl butyrate, dms., works lb. .85 - 1.00

Ethyl carbamate (see Urethane).

Ethyl cellulose, vis. 7 cps., bgs., 5,000 lb lots or more, frt. alld. E lb. .73 - —
bgs., smaller lots, frt. alld E lb. .75 - —
Vis 10, 20, 50 100, 150 cps., bgs., 5,000-lb lots or more, frt. alld. E lb. .68 - —
bgs., smaller lots, frt. alld E. lb. .70 - —

Ethyl chloride, tech., cyls., works, lb. .20 - .22
dms., works lb. .18 - .20
tanks, works lb. .10 - —

Ethyl cinnamate, cns. lb. 3.35 - 3.50

Ethyl ethanolamies, mixed, dms., c.l., dlvd. E lb. .43½- —
dms., l.c.l., dlvd. E lb. .44½- —
tanks, dlvd. E. lb. .41½- —

Ethyl ether, absolute, ACS, dms. lb. .37 - —
Anesthesia, USP, dealers, 1-lb. cns. lb. 1.01 - —
½-lb. cns lb. 1.09 - —
¼-lb. cns. lb. 1.21 - —
Indust., dms., c.l., dlvd. lb. .13½- —
dms., l.c.l., dlvd. E. lb. .15 - —
tanks, dlvd E. lb. .11 - —

2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E lb. .37 - —
dms., l.c.l., l.t.l., dlvd. E lb. .38½- —
tanks, dlvd. E. lb. .34½- —

2 Ethyl hexoic acid, lc. higher W. of Rockies.

2-Ethyl hexyl acrylate, dms., c.l. t.l., straight or mixed frt. alld. E lb. .42½- —
dms., l.t.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —

Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

2-Ethylhexyl alcohol, dms., c.l., dlvd. lb. .23¾- —
dms., l.c.l, dlvd lb. .25¼- —
tanks, dlvd. lb. .21¼- —

Ethyl iodide, cbys., works lb. 3.30 - —

Ethyl methacrylate, dms., c.l., frt. equald lb. .52 - —
dms., l.t.l., frt. equald lb. .52½- —
tanks, frt. equald lb. .50 - —

Ethyl morphine hydrochloride, USP, bots oz.11.85 - —

Ethyl oenanthate, dms lb. 1.05 - 1.30

Ethyl oxalate (see Diethyl oxalate).

Ethyl silicate, dist. (see Tetraethyl orthosilicate).

Ethyl silicate, 40% available SiO_2, dms., c.l., dlvd lb. .44½- —
dms., l.c.l., dlvd lb. .46 - —
tanks, dlvd lb. .42 - —

N-Ethyl-a-naphthylamine, dms., works. lb. 1.04 - —

N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld. lb. .83 - —

N-Ethyl-o-toluidine, bbls. lb. .88 - —

Ethylamine (see Mono-, Di-, or Tri-)

N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., l.c.l., frt. alld lb. .58 - —
tanks, frt. alld lb. .55 - —

Ethylbenzene, 99%, dms., c.l., t.l., frt. equald lb. .15 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .12½- —

2-Ethylbutyl alcohol, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾- —
tanks, works lb. .28 - —

Ethylene, contract, refy. gate lb. .0475- .0525

Ethylene dibromide, dms., c.l., frt. equald lb. .30½- —
dms., l.c.l., frt. equald lb. .31½- —
tanks, frt. equald lb. .28½- —

Ethylene dichloride, dms., c.l., dlvd. lb. .11½- —
dms., l.c.l., same basis lb. .13 - —
tanks, same basis lb. .09 - —

Ethylene dichloride prices W of Rockies, lc. per lb. higher

Ethylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —

Ethylene glycol monobutyl ether, dms., c.l., dlvd. E lb. .22 - —
dms., l.c.l., dlvd. E lb. .23½- —
tanks, dlvd. E lb. .19½- —

Ethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .18½- —

Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E lb. .19½- —
dms., l.c.l., dlvd. E lb. .20½- —
tanks, dlvd. E lb. .17 - —

Ethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .18½- —

Ethylene glycol monomethyl ether acetate, dms., c.l., dlvd. E lb. .29 - —
dms., l.c.l., dlvd. E lb. .29¾- —
tanks, dlvd. E lb. .27 - —

Ethylene glycol monostearate, tripie pressed, dms lb. .33 - .35

Ethylene oxide, dms., c.l., dlvd. E. lb. .21½- —
dms., l.c.l., dlvd. E lb. .24½- —
tanks, dlvd. E lb. .15½- —

Ethylene trichloride (see Trichloroethylene).

Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 - —
dms., l.c.l., dlvd. E., 100% basis. lb. .43 - —
tanks, dlvd. E., 100% basis lb. .40 - —
lots and over lb. 6.75 - —
200-lb. lots and over lb. 7.00 - —
100-lb. lots and smaller lb. 7.30 - 7.40

Ethylvanillin, 100-lb. fib. dms., 500-lb. lb. .85 - 1.40

Eucalyptol, USP, cns., dms lb. .44 - .55

Eucalyptus oil, NF, rectified, 70-75%, dms lb. .53 - .62

NF, rectified, 80-85%, dms. lb. 1.45 - —

Eugenol, tech., dms lb. 2.00 - —
USP, dms. lb. .12 - .15

Euphorbia herb, bls lb.

F

F salt, paste, tech. dms., works lb. 2.30 - —

Feldspar, 140-200 mesh, bulk, c.l., works ton.19.50 - —
Feldspar in bags $3 per ton higher.

Fennel oil, sweet, USP, cns lb. 1.95 - 2.25

Fennel seed, Argentine, bgs. lb. .16 - —
French, light, bgs lb. .16 - —
Indian, light, bgs lb. .17 - —
Rumanian, bgs. lb. .14 - —
Yugoslav, light, bgs lb. .16½- —

Fenugreek seed, Moroccan, bgs lb. .08 - —

Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms., l.c.l., works 100 lbs. 8.50 - —
Indust., cryst., bbls., c.l., works. 100 lbs. 5.25 - 6.75
bbls., l.c.l., works 100 lbs. 5.75 - 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade, tanks, frt. equald. 100% basis 100 lbs. 4.00 - —
USP, cryst., dms., t.l., works lb. .08½- —

Ferric citrate, gran., dms lb. .86 - —

Ferric hypophosphite, NF, dms. lb. 3.45 - —

Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼- —

Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. .89 - —

Ferric oxides (see iron oxides).

Ferric phosphate, NF, soluble, gran. pearls, cs lb. .72 - .75

Ferric pyrophosphate, NF VII, soluble, gran., pearls, dms. lb. .70 - —

Ferric resinate, 6¾% Fe., dms., ton lots, frt. ald lb. .40¼- —

Ferric stearate, dms., c.l., frt. alld. lb. .39 - —
dms., l.c.l., frt. alld lb. .40 - .44

Ferric sulfate, partly hydrated, bgs., c.l., works ton.35.25 - —
bgs., l.c.l., works ton.36.25 -42.25
bulk, c.l., works ton.33.25 - —

Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 - .68
Green pearls, USP XII, gran., dms lb. .66 - .69

Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½

Ferric-potassium oxalate, fine gran., dms lb. .32½- .34½

Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½

Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .96 - —

Ferrous sulfate, gran., bgs., c.l., works ton.34.50 - —
bgs., l.c.l., dlvd. Metropolitan area 100 lbs. 3.35 - 4.25
bbls., c.l., works ton.40.00 - —
bulk, c.l., works ton.27.00 - —
USP, cryst., bbls., dms lb. .09½- .10

Fir balsam, Canada, bbls. gal.32.00 -35.00
Oregon, bbls. gal. 3.40 - 4.64

Fir oil, Canada, cns lb. 1.75 - 2.50

Fish oil, refd., alkali, dms lb. .1250- .1300
Kettle-bodied, dms. lb. .1480- .1530
Light-pressed, dms. lb. .1100- .1150
tanks lb. .09½- —

Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms. 1,000,000 units. .12 - —

Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton.93.00 -94.00

Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts. ton.89.00 -90.00

Fleaseed (see Psyllium seed).

When you need ethyl alcohol...in any quantity, any grade...check with Eastman first, a primary producer. Eastman's manufacturing and distribution facilities teamed with its network of distributors are geared to meet your drum or bulk receiving schedule quickly, efficiently. Choose from a wide range of grades: anhydrous, 95%, specially denatured formulas and four proprietary (Tecsol®) solvents.

Tecsol is available in principal industrial centers for immediate shipment in drum or bulk through Eastman Chemical Products, Inc.,[1] or its distributors.[2] Write or phone the office nearest you for specifications and shipping data.

[1]Longview, Texas
Lodi, New Jersey
Kingsport, Tennessee

[2]Name of distributor in your area sent upon request.

Eastman CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE, subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc. Kingsport, Tennessee; Atlanta; Chicago; Cincinnati; Cleveland; Dallas; Framingham, Mass.; Greensboro, N. C.; Houston; New York City; St. Louis. West Coast: Wilson Meyer Co., San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Folic acid, USP, bots., fib. dms., kilo lots or more..gram. .30 - .44
10% feed grade, fib. dms., 3 kilos or more..kilo.30.00 -44.00
Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd..lb. .0695- —
tanks, dlvd. .....lb. .0430- —
Formaldehyde, methanol-free (uninhibited), tanks, dlvd..lb. .0375- —
Formic acid, 85%, cbys., c.l., works. lb. .1570- —
cbys., l.c.l., works.....lb. .1620- .1720
90%, cbys., c.l., works.....lb. .1625- —
cbys., l.c.l., works.....lb. .1675- .1775
Fringetree bark, bls.....lb. .65 - .70
Fumaric acid, tech., 250-lb. dms., c.l., frt. equald..lb. .23¼- —
dms., l.c.l., frt. equald.....lb. .24¾- —
Fumaric acid in bags ½c. per lb. less.
Furfural, dms., c.l., works.....lb. .13 - —
dms., l.c.l., works.....lb. .14 - —
tanks, dlvd. E.....lb. .12 - —
tanks, dlvd. W.....lb. .13 - —
Furfuryl alcohol, cns., works....lb. .28 - —
dms., c.l., t.l., Newark, N. J...lb. .20½- —
dms., l.c.l., l.t.l., Newark, N. J..lb. .21½- —
dms., c.l., t.l., Memphis, Tenn..lb. .19 - —
dms., l.c.l., l.t.l., Memphis, Tenn.lb. .20 - —
tanks, Memphis, Tenn. .....lb. .175 - —
Fusel oil, refd., dms., c.l., dlvd..lb. .18 - —
dms., l.c.l., dlvd. .....lb. .19½- —
tanks, dlvd. .....lb. .15½- —

G

G salt, bbls., frt. alld., 100% basis.lb. .73 - —
Gallic acid, NF, VII, bbls., 1,000-lb. lots..lb. 2.00 - —
bbls., smaller lots .....lb. 2.02 - 2.22
Tech., bbls., 1,000-lb. lots.....lb. 1.78 - —
bbls., smaller lots .....lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld..lb. 1.75 - —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. .....oz. 4.75 - 6.05
Imp., bots. .....oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, 75 AOAC test, bbls., c.l., dlvd..lb. .53 - —
150 AOAC test, bbls., c.l., dlvd. lb. .64 - —
200 AOAC test, bbls., c.l., dlvd. lb. .70 - —
225 AOAC test, bbls., c.l., dlvd. lb. .74 - —
275 AOAC test, bbls., c.l., dlvd. lb. .82 - —
Gelsenium root, bls. .....lb. .30 - .35
Gentian root, bls. .....lb. .24 - —
Grd., bbls., bxs. .....lb. .30 - —
Powd., bbls., bxs. .....lb. .30 - —
Geraniol, extra, cns., dms. .....lb. 1.75 - 2.40
Soap grade, dms. .....lb. .90 - 1.75
Standard, cns., dms. .....lb. 1.65 - —
Synthetic, dms. .....lb. 1.30 - —
Geranium oil, Algerian, cns.....lb.23.00 - —
Bourbon, cns. .....lb.30.00 - —
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns. .....lb. 1.90 - 2.70
Synthetic, dms. .....lb. 1.45 - —
Ginger oil, dist., bots. .....lb.11.50 -14.00
Ginger oleoresin, NF, from African root, bots..lb. 4.25 - 5.00
NF, from Jamaican root, bots. lb. 7.75 - —
Ginger root, Cochin, bgs.....lb. .29 - —
Jamaican, No. 3, bgs.....lb. .28 - —
Nigerian, split, bgs.....lb. .16½- —
Sierra Leone, bgs.....lb. .25 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, dms., c.l., t.l., f.o.b. works..lb. .20 - —
dms., l.c.l., f.o.b. works..lb. .21 - —
tanks, f.o.b. works.....lb. .17 - —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd..lb. .16 - —
131 jellygrams, bgs., c.l., same basis..lb. .16½- —
164 jellygrams, bgs., c.l., same basis..lb. .18½- —
191 jellygrams, bgs., c.l., same basis..lb. .19½- —
222 jellygrams, bgs., c.l., same basis..lb. .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis..lb. .16 - —
86 jellygrams, bgs., c.l., same basis..lb. .16 - —
113 jellygrams, bgs., c.l., same basis..lb. .16½- —
Glue, bone, green, 135 jellygrams, bgs., c.l., same basis..lb. .17½- —
164 jellygrams, bgs., c.l., same basis..lb. .18½- —
180 jellygrams, bgs., c.l., same basis..lb. .19½- —
200 jellygrams, bgs., c.l., same basis..lb. .20½- —
Bone glue, l.c.l., prices 2c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd..lb. .18 - —
95-149, bgs., c.l., dlvd.....lb. .19 - —
122-149, bgs., c.l., dlvd.....lb. .20½- —
150-177, bgs., c.l., dlvd.....lb. .22½- —
178-206, bgs., c.l., dlvd.....lb. .25 - —
Glue, hide, 207-236, bgs., c.l., dlvd lb. .28 - —
237-266, bgs., c.l., dlvd.....lb. .30½- —
267-298, bgs., c.l., dlvd.....lb. .32½- —
299-330, bgs., c.l., dlvd.....lb. .34½- —
331-362, bgs., c.l., dlvd.....lb. .36½- —
363-394, bgs., c.l., dlvd.....lb. .38 - —
395-427, bgs., c.l., dlvd.....lb. .40 - —
428-460, bgs., c.l., dlvd.....lb. .42 - —
461-494, bgs., c.l., dlvd.....lb. .44 - —
495-529, bgs., c.l., dlvd.....lb. .46 - —
Hide glue, l.c.l., prices 2c. higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld..lb. 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb. 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo.150.00 -300.00
Bots., 50-kilo lots.....kilo.100.00 - —
Bots., 500-kilo lots.....kilo. 75.00 - —
Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd..lb. .20½- —
nat., crude, soaplye, 80%, tanks, dlvd..lb. .18½- —
nat., refd., USP, CP, 99%, dms., c.l., dlvd..lb. .30⅞- —
dms., l.c.l., dlvd. .....lb. .31⅝- —
tanks, dlvd. .....lb. .29⅛- —
Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd..lb. .30 - —
dms., l.c.l., dlvd. .....lb. .30¾- —
tanks, dlvd. .....lb. .28¼- —
nat., high gravity, dms., c.l., dlvd..lb. .30¾- —
dms., l.c.l., dlvd. .....lb. .31½- —
tanks, dlvd. .....lb. .29 - —
Glycerine, dom., syn., dms., c.l., dlvd..lb. .31 - —
dms., l.c.l., dlvd. .....lb. .31¾- —
tanks, dlvd. .....lb. .29¼- —
Imp., nat., crude, soaplye, 80%, c.i.f..lb. .17½- —
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works..lb. .40 - —
dms., l.c.l., same basis.....lb. .42 - —
tanks, same basis.....lb. .39 - —
Glyoxal, 30%, dms., c.l., works..lb. .20½- —
dms., l.c.l., works.....lb. .21¼- —
tanks, works .....lb. .18 - —
Golden seal root, NF, tested, bls. lb. 3.10 - —
Gramicidin, 1 to 5 kilos, f.o.b. works, gram. 4.70 - —
Grapefruit oil, dms.....lb. 3.50 - —
Graphite, amorp., powd., bgs., fib. dms., ex whse..lb. .06 - .09½
Cryst., 88-90%, powd., bgs., fib. dms., ex whse..lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse..lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse..lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse..lb. .29 .31
No. 2, 90-95%, bgs., fib. dms., ex whse..lb. .29 - .31
Grease, white, choice all hog, tanks, dlvd..lb. .07¼- .07⅜
Yellow, tanks, dlvd. .....lb. .05⅛- .05¼
Grease oil, No. 1, dms., c.l. ....lb. .13¾- —
dms., l.c.l. .....lb. .14¾- .15¾
Extra winter, strained, dms., c.l. lb. .16¼- —
dms., l.c.l. .....lb. .17¼- .18¼
Prime, burning, dms., c.l. ....lb. .17¾- —
dms., l.c.l. .....lb. .18¾- .19¾

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls. ....lb. .40 - —
Guaiacol, NF, cryst., dms., tins..lb. 2.10 - 2.15
NF, liq., cbys., dms. .....lb. 2.30 - 2.40
Guaiacol carbonate, NF VII, dms lb. 3.40 - 3.45
Guaiacwood oil, cns. .....lb. .65 - .80
Guar gum, food grade, bgs., c.l..lb. .38 - —
bgs., 5,000 lbs or more.....lb. .39 - —
Indust., bgs., c.l.....lb. .32 - —
Tech grade, bgs. .....lb. .30 - .33

GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

H

H acid, dry, bbls., c.l., frt. alld., 100% basis..lb. .90 - —
bbls., l.c.l., same basis.....lb. .95 - —
Hansa yellow, 10 G, bbls., dlvd. E. of Rockies..lb. 2.45 - —
Hansa G yellow, pigment, bbls...lb. 2.20 - —
Hawthorn berries, bgs. .....lb. .18 - .20
Heliotropin, 100-lb. lots, dms.....lb. 2.60 - 3.40
Hellebore root, dom., green, bls..lb. .70 - .75
Helonias root, bls. .....lb. 1.50 - —
Hemlock oil, cns. .....lb. 2.55 - 3.00
Henbane leaves, bls.....lb. .40 - .45
Heptachlor, dms., c.l., t.l., frt. alld., 100% basis..lb. .96 - —
Heptane, indust., tankcars, New Jersey and New York gal. .20 - —
Houston, Texas .....gal. .1625- —
Hesperidin, purif., 100-lb. fib. dms., f.o.b., works..lb. 8.95 - —
Hesperidin methylchalcone, bots., 50-lb. lots, works..lb.22.50 - —
bots., 5-lb. lots, works.....lb.23.00 - —
bots., 1-lb. lots, works.....lb.23.50 - —
Hexachlorophene, dms., 1,100 lbs. or more..lb. 1.84 - —
dms., to 1,100 lbs. .....lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York City..lb. .233 - —
Hexamethylenetetramine, tech., bgs., 1,000-19,999-lb. lots, same basis..lb. .243 - —
bgs., smaller lots, same basis.lb. .253 - —
fib. dms., 1,000-lb. lots or more, same basis..lb. .250 - —
fib. dms., smaller lots, same basis..lb. .253 - —
Hexamethylenetetramine, USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia..lb. .42½- —
bgs., smaller lots, same basis lb. .43½- .48⅛
Hexane, industrial, tankcars, New Jersey and New York gal. .20 - —
Houston, Texas .....gal. .16 - —

CELANESE TRIMETHYLOLPROPANE

adds outstanding protection, durability and color retention to alkyd paints

Here's how to improve alkyd paint quality without increasing cost. Paint formulations made with trimethylolpropane based resins withstand outdoor exposure and weather . . . adhere strongly . . . resist alkalis and detergents.

They impart hardness, impact resistance, and color retention on overbake or aging, to a greater degree than conventional alkyds. Dry and baking times are reduced, too.

Thus, in highly competitive fields, such as appliance and automotive, trimethylolpropane based resins provide marked competitive advantages.

Celanese Trimethylolpropane is promptly available in any quantity, at a price that's competitive. It is shipped in protective, multi-wall, polyethylene-coated aluminum foil-lined heat-sealed bags.

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Canadian Affiliate: Canadian Chemical Company, Limited, Montreal, Toronto, Vancouver.
Export Sales: Amcel Co., and Pan Amcel Co., Inc., 180 Madison Avenue, New York 16.

1-Hexanol, dms., c.l., works ..... lb. .35 - —
dms., l.c.l., works ..... lb. .35¾- —
tanks, works ..... lb. .33 - —
Hexyl cinnamic aldehyde, dms. lb. 4.00 - 7.50
n-Hexyl methacrylate, dms., c.l., works lb. .75½- —
dms., l.c.l., works ..... lb. .76 - —
Hexyl salicylate, dms. ..... lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd. lb. .17½- —
dms., l.c.l., dlvd. ..... lb. .19 - —
tanks, dlvd. ..... lb. .15 - —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd lb.14.00 - —
dms., smaller lots, dlvd. ... lb.14.50 - —
Homatropine hydrobromide, USP, bots oz. 3.25 - —
Homatropine methylbromide, USP, bots oz. 3.25 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago, unit-ton. 6.75 - —
Horehound herb, bls. ..... lb. .18 - .20
Hydrastis (see Goldenseal).
Hydrazine hydrate, 85% ret. dms., works lb. 1.35 - 1.55
100% ret. dms., works ..... lb. 1.60 - 1.90
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works lb. 2.92 - —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1 lb. .29¼- —
dms., l.c.l., dlvd. zone 1 lb. .29¾- .30¼
tanks, dlvd. zone 1 ..... lb. .27¼- —

Zone 1 for hydroabieyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys., frt. equald. lb. .48 - .56
Hydrochloric acid, anhyd. (see Hydrogen chloride).
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt. equald ton.28.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 3.15 - —
tanks, works, frt. equald ....ton.30.00 - —
Hydrochloric acid, 22°, cbys., c.l., works 100 lbs. 3.25 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt. equald. ton.35.00 - —
Hydrochloric acid, CP, USP, consumers, cbys., extra, c.l., works lb. .15¾- —
cbys., l.c.l., same basis lb. .17¼- .17¾
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis. lb. .20¾- —
Hydrocortisone acetate, bulk, bots., kilo lots or more gram. 1.10 - 1.90
Hydrocortisone alcohol, bulk, bots., kilo lots or more gram. 1.15 - 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pt. bots., f.o.b. works pt. .70 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride).
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal. dms., c.l., t.l., dlvd. 100 lbs.19.25 - —
55-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs.20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 - —
20-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs.22.50 - —
tanks, works frt. equald. 100 lbs.13.40 - —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic acid, dms., works, 30% basis lb. .06 - —
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
50-lb. cyls., l.c.l., works ..... lb. .55 - .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works lb. .45 - —
Hydrogen cyanide, liq., 98%, tanks, works lb. .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30½- .32½
cyls., dlvd W. ..... lb. .39 - —
tanks, works ..... lb. .18 - —
Hydrogen peroxide, 35%, dms., c.l., dlvd. lb. .202 - —
dms., l.c.l., dlvd. ..... lb. .211 - —
tanks, dlvd. ..... lb. .1800- —
Hydroquinone, photo grade, dms., 50-lbs., f.o.b. works lb. 1.10 - —
Tech., dms., c.l., dlvd. ..... lb. .82½- —
dms., l.c.l., dlvd. ..... lb. .84½- —
Hydroquinone monomethyl ether, dms., t.l., dlvd lb. 2.59 - —
dms., l.t.l., dlvd. ..... lb. 2.61 - —
Hydroxyacetic acid, tech., 70% dms., Philadelphia and Chicago lb. .11 - —
tanks, Belle, W. Va. ..... lb. .073 - —
Hydroxycitronellol, cns. ..... lb. 4.85 - 5.75
Hydroxyethyl cellulose, add grades, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point lb. .84 - —
fib. dms., 2,000 to 19,999-lb. lots, same basis lb. .89 - —
fib. dms., 100 to 1,999-lb. lots, same basis lb. .93 - —
fib dms., smaller lots, same basis lb. 1.03 - —
Hyoscine salts (see Scopolamine).
Hyoscyamine hydrobromide, bots.oz. 7.00 - —
Hyoscyamine sulfate, bots. ..... oz. 7.00 - —
Hypophosphorous acid, purif., 50%, 10-cbys., f.o.b. works lb. 1.95 - —
NF, 50%, 10-cbys., same basis lb. 1.35 - —

I

Ichthammol, NF, dms. ..... lb. .75 - 1.05
Indigo (see Dyes, coaltar, 1171 indigo, syn.).
Indole, CP, bots. ..... lb.13.75 -15.00
Inositol, 50-100 lb. dms., 1,000 lbs. or more, dlvd. lb. 4.50 - —
Inositol, 50-lb. lbs., less than 1,000 lb., dlvd lb. 4.75 - —
10 lb. cns., 10-50 lbs., dlvd. lb. 5.00 - —
5 lb. bots., dlvd. ..... lb. 5.25 - —
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. ..... lb. .95 - —
Resub., USP, dms., f.o.b. works lb. 2.00 - 2.02
Iodochlorohydroquinolin, USP, dms. lb. 3.60 - —
Iodoform, NF, dms., 300-lbs., f.o.b. works lb. 4.90 - —
dms., 100-lbs., same basis ... lb. 5.05 - —
a-Ionone, cns. ..... lb. 4.60 - 5.75
b-Ionone, cns. ..... lb. 4.15 - 6.15
Ipecac root, whole, bgs. ..... lb. 8.00 - 8.50
Powd., bbls., bxs. ..... lb. 9.50 -10.00
Irish moss, bleached, prime, bls lb. .25 - .27
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 - —
bbls., l.c.l., ton lots, same basis. lb. .58 - —
bbls., smaller lots, same basis. lb. .59 - —
Dom., reg., bbls., c.l., dlvd. E lb. .52 - —
Iron blue, alkali-resisting, dom., reg., bbls., l.c.l., ton lots, same basis lb. .53 - —
bbls., l.c.l., smaller lots, same basis lb. .54 - —
Imp., British, reg., bbls., c.l., dlvd. E lb. .48 - —
bbls., l.c.l., ton lots, same basis lb. .49 - —
bbls., l.c.l., smaller lots, same basis lb. .50 - —

Iron blue dlvd. prices 1c. higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont., Wyo., Utah, Col. and Nev.

Iron compounds (see Ferric or Ferrous).
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works ..... lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works ..... lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red., bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, E. St. Louis, New York City lb. .14¼- —
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., l.c.l., works ..... lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l., ex dock lb. .06 Nom.
bbls., l.c.l., ex whse, New York. lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¼- —
Peruvian type, bgs., l.c.l. lb. .023 - .024
Iron oxide, yellow, pure, light lemon shade, bgs., c.l., works lb. .12¼- —
Other shades, same basis lb. .12 - —
Isoamyl alcohol, dms., c.l., works, frt. alld E lb. .27½- —
dms., l.c.l., same basis ..... lb. .29 - —
tanks, same basis ..... lb. .25 - —
Isoborneol, cns. ..... lb. 1.44 - 1.80
Isobornyl acetate, cns. ..... lb. .46 - .56
Isobornyl formate, dms. ..... lb. 1.20 - —
Isobornyl proprionate, dms. ..... lb. 1.25 - 1.35
Isobutyl acetate, perfume grade, cns. lb. .35 - —
Isobutyl acetate, solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l., same basis ..... lb. .16¾- —
tanks, same basis ..... lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd. ..... lb. .17 - —
tanks, dlvd. ..... lb. .13 - —
Isobutylene, 99%, tanks, works gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works lb. .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd. ..... lb. .28½- —
Tech., dms., c.l., dlvd. ..... lb. .22 - —
dms., l.c.l., dlvd. ..... lb. .23 - —
tanks, dlvd. ..... lb. .19½- —
Isobutyronitrile, dms., c.l., dlvd. lb. .52 - —
dms., l.c.l., same basis ..... lb. .57 - —
Isobutyric acid, dms., c.l., t.l., dlvd. lb. .35 - —
dms., l.c.l., l.t.l., same basis lb. .36½- —
t.c. t.t., same basis ..... lb. .33 - —
Isoeugenol, cns. ..... lb. 3.40 - 4.25
Isoniazid, powd., bulk, kilo or more kilo.16.00 - —
Isonicotinic acid, 100-lb. fib. dms., works lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd. E. ..... lb. .25 - —
tanks, dlvd. E. ..... lb. .21 - —
Isopentane, com'l. grade, tanks, f.o.b. Tex. refy. gal. .16½- —
Isophorone, dms., c.l., works ... lb. .24½- —
dms., l.c.l., works ..... lb. .25¼- —
tanks, works ..... lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald. lb. .18 - —
dms., l.c.l., same basis ..... lb. .19 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms., l.c.l., same basis ..... lb. .15¼- —
tanks, same basis ..... lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd. gal. .58 - —
dms., l.c.l., dlvd. ..... gal. .68 - —
tanks, dlvd. ..... gal. .42 - —
Isopropyl alcohol, refd., 95%, c.l., dms., dlvd. gal. .60 - —
dms., l.c.l., dlvd. ..... gal. .70 - —
tanks, dlvd. ..... gal. .44 - —
anhyd., c.l., dlvd. ..... gal. .62 - —
dms., l.c.l., dlvd. ..... gal. .72 - —
tanks, dlvd. ..... gal. .46 - —
Isopropyl benzene (see Cumene).

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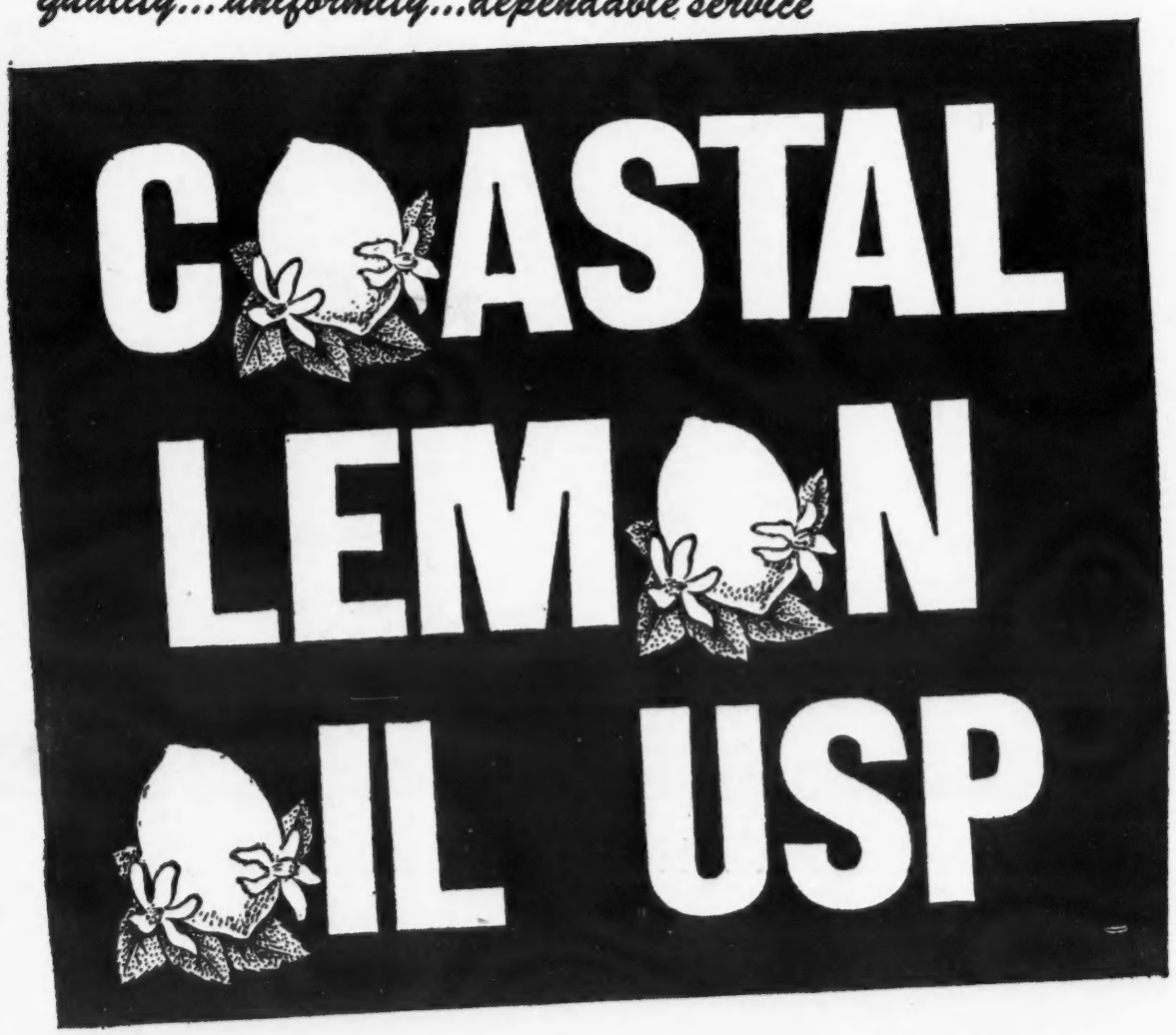

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417 Rosehill Place, Elizabeth 2, New Jersey

Ventura Processors, 2325 Vista Del Mar Drive, Ventura, California

Isopropyl ether, dms., c.l., dlvd. lb. .09¼- —
dms., l.c.l., dlvd. lb. .11 - —
tanks, dlvd. lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l., t.l., works lb. 1.00 - —
dms., l.c.l., works lb. 1.05 - 1.25
tanks, works lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 - —
450-lb. fib. dms., l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 - 1.25
Itaconic acid, refd., bgs., c.l., f.o.b. works lb. .53½- —
bgs., l.c.l., same basis lb. .54½- —
Tech., bgs., c.l., same basis lb. .38½- —
bgs., l.c.l., same basis lb. .39½- —

J

J acid, paste, bbls., works, 100% basis lb. 2.70 - —
Powd., bbls., same basis lb. 2.75 - —
Jalap root, NF, bls. lb. .60 - —
NF, powd., bbls., bxs. lb. .70 - .75
Japan wax, cs. lb. .29 - .31
Juniper berries, bgs. lb. .16 - .17
Juniper berry oil, NF, bots. lb. 2.90 - 3.75
Twice rectified, bots. lb. 3.25 - —
Juniper tar oil, NF, dms. lb. .42 - .60
Juniper wood oil, tech., cns. lb. .38 - .55

K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms. lb. .10 - .12
NF, colloidal, 50-lb. bgs. lb. .15½- .17½
Karaya gum, No. 1, NF, powd., bls lb. .48 - .50
No. 2, powd., bbls. lb. .43 - .45
No. 3, powd., bbls. lb. .37 - .40
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. lb. .13 - .15

L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 gal. .15125- —
Houston, Texas gal. .16 - —
Lacquer diluent, petroleum, 200°F-240°F b.r., tankcars, New Jersey or New York gal. .20 - —
Group 3 gal. .14125- —
Houston, Texas gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1985- —
bbls., dms., 20 or more, frt. equald lb. .2035- —
bbls., dms., 5 to 19, frt. equald. lb. .2035- —
bbls., dms., 1 to 4, frt. equald. lb. .2135- —
Lactic acid, edible, 80%, bbls., c.l., dms., frt. equald lb. .3335- —
bbls., dms., 20 or more, frt. equald lb. .3385- —
bbls., dms., 5 to 19, frt. equald. lb. .3435- —
bbls., dms., 1 to 4, frt. equald. lb. .3485- —
Plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls., 20 or more, works lb. .2790- —
bbls., 5 to 19, works lb. .2840- —
bbls., 1 to 4, works lb. .2890- —
80%, bbls., c.l., works lb. .4625- —
bbls., 5 to 19, works lb. .4725- —
bbls., 1 to 4, works lb. .4775- —
Tech., 44%, bbls., c.l., works, 100 lbs. 12.45 - —
bbls., l.c.l., works 100 lbs. 12.85 - —
USP, 85%, cbys. lb. .85 - —
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
bgs., 6,000-lb. lots, frt. equald lb. .14½- —
bgs., 2,000-lb. lots, frt. equald lb. .14¾- —
bgs., 200-lb. lots, frt. equald lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
Lactose, ferment, grade, bgs., c.l., works lb. .08½- —
Lactose, USP, reg., fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald lb. .22¼- —
200-1,880-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c. to 1c. lower.
Lactose, USP, spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., l.t.l., frt. equald lb. .19 - .19¾
Lady's slipper root, bls lb. 3.00 - 3.50
Lamp black, bgs., c.l., works lb. .16 - .45
Lanolin, USP, anhyd., 400-lb. dms., works lb. .24 - .26
USP, annyd., cosmetic, 400-lb. dms., works lb. .26 - .30
USP, hydrous, 400-lb. dms., works, lb. .20 - —
Lard, cash, dms., Chicago lb. 11.70 - —
Lard oil (see Grease oil).
Larkspur seed, bgs. lb. .55 - —
Laurel leaf oil, dms., cns. lb. 9.75 - 12.50
Laurent's acid, bbls lb. .70 - —
Lauric acid, pure, dms. lb. .35¾- .36¼
tanks lb. .32¾- —
Lauryl alcohol, bots lb. 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works lb. .65½- —
dms., l.t.l., works lb. .63 - —
Lavandin oil, 22-24%, dms. lb. 1.10 - 1.50
Abrial, dms. lb. 1.00 - 1.50
Lavender flowers, medium, bls. lb. .55 - .60
Ord., bls. lb. .20 - .25
Select., bls. lb. .90 - 1.00
Lavender flower oil, USP, French, 35-37% ester, cns. lb. 1.85 - 4.00
40-42% ester, cns. lb. 5.00 - 7.75
Spike, Spanish, cns. lb. 2.20 - 3.00
Lead acetate, NF, cryst., gran., powd., bbls lb. .34½- —
White, cryst., bbls. lb. .25½- —
gran., bbls. lb. .26½- —
powd., bbls. lb. .26½- —
Lead arsenate, acid powder, dealers, 3-50-lb. bgs. or any quantity, frt. alld. on $150 or more lb. .30½- —
1-lb. bgs., same basis lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt. point, frt. alld. lb. .17 - —
bbls., l.c.l., same basis lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate).
Lead chloride, dms. lb. .52 - —
Lead iodide, NF, V jars lb. 3.82 - —
Lead linoleate fused, 26% Pb, dms. lb. .38 - —
Lead metal prime, pigs, New York, lb. .12 - —
St. Louis lb. .1180- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .1385- —
bgs., l.c.l., same basis lb. .1485- —
Lead naphthenate, liq., 16% Pb., dms., dlvd lb. .19½- —
24% Pb., dms., dlvd. lb. .24¼- —
Solid, 37% Pb., dms., dlvd. lb. .31¾- —

Lead nitrate, bbls. lb. .34¼- .35¼
Lead orthosilicate gel., 50-60% PbO, dms., works lb. .29¾- .34¼
Lead peroxide, tech. powd., bbls lb. .45 - .50
Lead phthalate, dibasic, dms., works, lb. .41 - —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equaid. lb. .1475- —
bbls., l.c.l., same basis lb. .1575- —
97% Pb_3O_4, bbls., c.l., same basis lb. .1495- —
bbls., l.c.l., same basis lb. .1595- —
98% Pb_3O_4, bbls., c.l., same basis lb. .1510- —
bbls., l.c.l., same basis lb. .1610- —
Lead resinate precip. 23% Pb, dms., ton lots, dlvd lb. .43¾- —
Lead salicylate, normal dms., works lb. .46 - —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld lb. .20 - —
bgs., l.c.l., same basis lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb, dms. lb. .17¼- —
24% Pb, dms. lb. .26¾- —
Solid, 30% Pb, dms. lb. .23¼- —
Lead, white, basic carbonate, bgs., c.l., shipt pt., frt. alld lb. .18 - —
bgs., l.c.l., same basis lb. .19 - —
basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .16½- —
bgs., l.c.l., same basis lb. .17½- —
basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .17 - —
bgs., l.c.l., same basis lb. .18 - —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works, lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16

Lecithin, edible, tech., unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms., l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 100-lb. package, works lb. 6.45 - —
Lemon oil, USP, Calif., cns., dms. lb. 1.25 - 1.50
Messina, cns. lb. 3.25 - 4.00
Lemongrass oil, cns., dms. lb. 2.00 - 2.20
dl-Leucine, dms., works lb. 12.25 - 15.00
Licorice root, gran., bls. lb. .13 - —
Powd., bls. lb. .15 - .16
Whole, bls. lb. .09 - .10
Lignaloe wood oil, Mexican, cns. lb. 2.75 - 3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate).
Lilac oil lb. 1,500.00
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton. 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton. 17.25 - —
spray, bgs., c.l., same basis ton. 18.25 - —
For New York delivery, add $6.29 freight charge.
Lime oil, dist., Mexican, cns. lb. 5.75 - —
West Indian, cns. lb. 5.75 - —
Expressed, West Indian, cns. lb. 7.75 - 8.75
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).

Linalool, ex bois de rose oil, dms. lb. 2.45 - 4.25
Syn., 98-100%, dms., works lb. 2.40 - 2.75
Linalyl acetate, ex bois de rose, 90-92%, dms lb. 2.65 - 4.50
96-98%, dms. lb. 3.25 - —
Syn., 98-100%, dms., works lb. 2.75 - —
Lindane, 25% formulation, to distributors, dms., frt. alld. lb. 1.35 - 1.50
Lindane, tech., to formulators, 250-lb. dms., 5,000 lbs., dlvd. lb. 2.13 - —
100-lb. dms., 5,000-lbs., dlvd. lb. 2.15 - —
250-lb. dms., less than 5,000-lbs., dlvd lb. 2.18 - —
100-lb. dms., less than 5,000-lbs., dlvd lb. 2.20 - —
Linden flowers, with leaves, bls lb. .35 - .40
Without leaves, bls. lb. .42 - .45
Linseed meal, expeller, 32% bulk, Minneapolis, mills ton. 58.50 - —
Extracted, 34% bulk, same basis ton. 53.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1680- —
dms., l.c.l., New York lb. .1770- .1820
tanks, f.o.b. Minneapolis lb. .1320- —
tanks, New York lb. .1431- —
tankwagon, New York lb. .1481- —
Boiled linseed oil, .006c. per lb higher.
Linseed oil, acid, dist., dms. lb. .2030- —
Water-white, dms. lb. .2330- —
Litharge, coml., powd., bbls., c.l., works, frt. equald lb. .1425- —
bbls., l.c.l., same basis lb. .1525- —

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ONE PRICE — *That Saves You Money*
. . . and Perfect Performance for *Every* Purpose!

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Unadulterated
California
LEMON OIL
U. S. P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

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MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Mineral Orange—Nitrobenzene

Mineral orange, American, bbls., c.l., works lb. .17 • —
bbls., c.l., same basis lb. .18 • —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 • —
New York gal. .305 • —
Houston, Texas gal. .25 • —
regular, tankcars, New Jersey and New York gal. .18 • —
Group 3 gal. .12875- —
Houston, Texas gal. .145 • —
140 F. flash, New York, New Jersey at terminal gal. .205 • —
Houston, Texas gal. .17 • —
Mink oil, dms. lb. 2.75 • —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lb. 6.30 • —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .10 • .10½
tanks, New York gal. .13½- —
Molybdated orange, bbls. lb. .49 • —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 • —
325 mesh, ctns., works kilo. 9.13 • —
Molybdenum trioxide, purif., dms., works lb. 1.15 • —
Tech., chemical, dms., works, basis Mo content lb. 1.48 • —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 • —
Molybdic acid, 85%, dms., works. lb. 1.05 • 1.15
Monoallylamine, dms., c.l., dlvd lb. .965 • —
dms., c.l., dlvd. lb. .995 • —
tanks, dlvd. lb. .96 • —

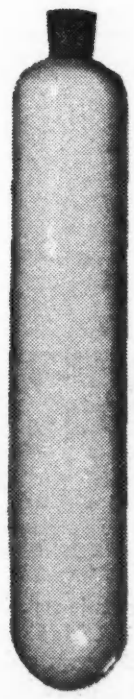
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb. .57½- —
dms., l.c.l., same basis lb. .59 • —
tanks, same basis lb. .55 • —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 • —
dms., l.c.l., works lb. .56 • —
tanks, works lb. .54 • —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 • —
dms., l.c.l., works lb. .56 • —
tanks, works lb. .54 • —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E. lb. .10½- —
dms., l.c.l., same basis lb. .11½- —
tanks, same basis lb. .08¾- —
Monoethanolamine, dms., c.l., dlvd. E. lb. .27½- —
dms., l.c.l., same basis lb. .29 • —
tanks, same basis lb. .25 • —
Monoethylalphanaphthylamine (see
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis lb. .38½- —
dms., l.c.l., dlvd. E., 100% basis. lb. .40 • —
tanks, dlvd. E., 100% basis lb. .35 • —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E. lb. .27½- —
dms., l.c.l., same basis lb. .29 • —
tanks, same basis lb. .25 • —

Monoisopropylamine, anhyd., dms., c.l., dlvd. lb. .33½- —
dms., l.c.l., same basis lb. .35 • —
tanks, same basis lb. .31 • —
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis lb. .30 • —
tanks, 100% basis lb. .26 • —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .36 • —
Monomethylamine, 30-35% soln., dms., l.c.l., frt. equald, 100% basis lb. .36½- —
tanks, frt. equald., 100% basis, lb. .26 • —
40% soln., dms., frt. equald., 100% basis lb. .33 • —
dms., l.c.l., frt. equald., 100% basis lb. .33½- —
tanks, frt. equald, 100% basis. lb. .26 • —
Monopentaerythritol, tech., bgs., c.l., dlvd. E lb. .31 • —
bgs., l.c.l., dlvd. E lb. .32 • —
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld lb. 3.05 • —
dms., 100-lb. lots, same basis lb. 3.25 • —
Monosodium glutamate, dms., dlvd. lb. 1.07 - 1.15
Monosodium phosphate (see sodium phosphate, monobasic).
Montan wax, Calif., refd., bgs. lb. .27 • .28
Imp., crude, Bohemian, bgs. lb. .21 • .22
German, bgs. lb. .25 • .26
Morphine, cns., 100-oz., f.o.b. works. oz. 12.35 • —
Morphine hydrobromide, cns., 100-oz., f.o.b. works oz. 9.90 • —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works oz. 9.90 • —
Morphine sulfate, USP, cns., 100-oz., f.o.b. works oz. 9.90 • —

Morpholine, dms., c.l., dlvd. E. lb. .55¼- —
dms., l.c.l., dlvd. E. lb. .56¼- —
tanks, dlvd. E. lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb. lots lb. 4.40 - 4.90
cns., 25-lb. lots lb. 4.50 - 5.00
Ketone, fib. dms., 100-lb. lots lb. 4.60 - 5.10
cns., 25-lb. lots lb. 4.70 - 5.20
Xylol, fib. dms., 100-lb. lots. lb. 1.26 • —
cns., 25-lb. lots lb. 1.40 • —
Mustard seed, Danish, yellow, bgs. lb. .11½- —
Montana, yellow, bgs. lb. .10½- —
Oriental, bgs. lb. .08 • —
Mustard, oil, syn., bots. lb. 1.60 - 1.85
Myristic acid, bgs. lb. .28¼- .30¾
tanks lb. .27¼- —
Myrrh gum, cs. lb. .65 - .75

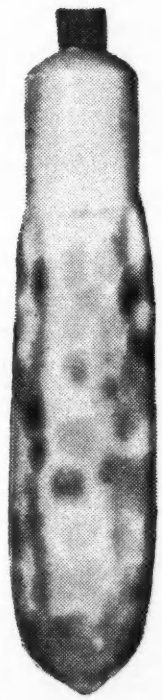
N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York gal. .19 • —
Group 3 gal. .13875- —
Houston, Texas gal. .155 • —
Naphthalene, crude, dom., 78°, tanks, frt. equald lb. .06 • —
imp., 78°, bgs., large lots lb. .09½ Nom.
Refd., indust., chipped, crushed, bgs., frt. equald lb. .13½- —
tanks, same basis lb. .10¾- —
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis. lb. .15½- —
cs., 50 lbs., c.l., same basis. lb. .15¾- —
1-lb. pkgs., c.l., same basis. lb. .18½- —
a-Naphthol, dms., frt. alld lb. 1.02 • —
b-Naphthol, tech., flake, bbls., c.l., works lb. .34 • —
bbls., l.c.l., works lb. .36 • —
Naphthol, ITR, red toner, bbls., works lb. 5.00 • —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, dms., frt. alld lb. .52 • —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 • —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib. dms. lb. 8.50 • —
Neatsfoot oil, 15° cold test, dms. lb. .29 Nom.
20° cold test, dms. lb. .28 Nom.
30° cold test, dms. lb. .27 Nom.
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 • —
fib. dms., 100-999-gram lots, basis activity gram. .30 • —
Tech., fib. dms. gram. .13½- —
Neopentylglycol, dms., c.l., dlvd. lb. .32 • —
dms., l.c.l., same basis lb. .33 • —
Nerol, dms. lb. 4.75 • —
Neroli oil, NF, French, bots. lb. 425.00 - 575.00
Tunisian, bots. lb. 400.00 • —
Nerolin, cns. lb. 2.45 - 2.85
Neville and Winther's acid, dms., frt. alld. lb. 1.40 • —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .68½- .75½
Nickel carbonate, bbls., dlvd. lb. 78¼- .85¼
Nickel chloride, bbls., dlvd. lb. .37 • .45
Nickel formate, bbls., ton lots, frt. alld. lb. .72 • .73
Nickel metal, electro cathodes, cs., works lb .74 • —
Nickel nitrate, dms., frt. alld. lb. .31½- .33¼
Nickel oxide, black, bbls. lb. .85 • —
Green, bbls. lb. .84 • —
Nickel sulfate, bgs., c.l., dlvd. lb. .28 • —
bgs., l.c.l., dlvd. lb. .28½- .36
Nicotinamide, USP, 50-kilo., dms., 100 kilos., dlvd. kilo. 6.50 • —
dms., less than 100 kilos, dlvd. kilo. 6.60 - 7.00
Nicotine sulfate, 40%, dealers, 50-lb. dms. frt. alld lb. 1.20 • —
40%, manufacturers, 500-lb. dms., frt. alld lb. 1.05 • —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. lb. .10¼- —
Nikethamide, cbys. lb. 5.00 • —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs. 5.75 • —
cbys., l.c.l., works E 100 lbs. 6.05 - 6.85
38° Be., cbys., c.l., works E. 100 lbs. 6.25 • —
cbys., l.c.l., works E 100 lbs. 6.55 - 7.35
40° Be., cbys., c.l., works E. 100 lbs. 6.75 • —
cbys., l.c.l., works E 100 lbs. 7.05 - 7.85
42° Be., cbys., c.l., works E. 100 lbs. 7.25 • —
cbys., l.c.l., works E 100 lbs. 7.55 - 8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis 100 lbs. 3.90 • —
94⅓ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 • —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
cbys., extra, l.c.l., works lb. .20 • —
5-pint bots., extra, cs., c.l., same basis lb. .22½- —
5-pint bots., extra, cs., l.c.l., same basis lb. .24 • .25
dms., frt. alld lb. .99 • —
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 • —
Paste, dms., frt. alld., 100% basis. lb. 1.10 • —
o-Nitroaniline, flaked, dms., t.l., frt. alld lb. .49 • —
dms., l.t.l., frt. alld. lb. .51 • —
o-Nitroaniline orange toner, kgs. lb. 1.35 • —
p-Nitroaniline, c.l., t.l., dms., frt. alld lb. .445 • —
dms., l.c.l., same basis lb. .46½- —
o-Nitroanisole, tech., tanks, frt. alld. lb. .36 • —
p-Nitroanisole, tech., solid, dms., frt. alld lb. .72 • —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .13 • —
dms., l.c.l., frt. alld. lb. .14 • —
tanks, frt. alld. lb. .11 • —



with

2-NP!



without

2-NP!

here's proof that you can put greater chemical resistance in your epoxy films

The photograph above dramatically shows the comparative chemical resistance to nitric acid of a pigmented epoxy film cast from 2-NP as compared with one cast from MIBK. Both slugs were exposed to the acid for 48 hours. And what a difference!

In other words, 2-Nitropropane is excellent for epoxy resins, *your* epoxy resins. Solvent mixtures based on 2-NP eliminate many of the weaknesses inherent in solvent systems heretofore used in epoxy resin spray finishes.

You get: greater chemical resistance, improved drying time, favorable evaporation rate, marked reduction in pinholing, and less water-vapor permeability.

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COMMERCIAL SOLVENTS CORPORATION

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The production of fatty acids by Armour is mostly a process of exacting automation. But no less important is the factor you see illustrated above—the human element. Armour has a full complement of well-trained men. Men who enjoy the challenge of even the simplest of problems. Men whose knowledge and experience contribute immeasurably to Armour quality.

This human element, plus complete instrumentation, enables Armour to produce high quality products, such as Neofat® 18. This is Armour's Commercially Pure Stearic, with an extremely low iodine value, high melting point, and an exceptionally high stearic acid content. Neo-fat 18 is especially noted for its stability, purity, and uniformity from lot to lot. These advantages assure you longer storage stability and product shelf-life, better performance, and a quality reputation.

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p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
4-Nitro-2-aminophenol, tech., paste, dms., l.c.l., works lb. .64 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .37½- —
bbls., l.c.l., same basis lb. .33½- .40½
18-20, cps., bbls., c.l., same basis lb. .39½- —
bbls., l.c.l., same basis lb. .40½- .42½
250-400, 600-1,000 seconds, bbls., l.c.l., same basis lb. .43 - .46
Nitrocellulose, spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis lb. .43 - —
bbls., l.c.l., same basis lb. .44 - .46
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .42 - —
bbls., l.c.l., same basis lb. .43 - .45

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

o-Nitrochlorobenzene, dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-p-cresol, tech., dms., dlvd lb. .88 - —
Nitroethane, dms., c.l., dlvd. E lb. .25 - —
dms., l.c.l., dlvd. E lb. .2[illegible]½- —
tanks, dlvd E lb. .22½- —

Nitroethane prices West of Rockies are 1c. higher.

Nitrogen solutions, tanks, frt. equald, N unit. 1.26 - —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 - —
Cyls., t.l., min. 5 tons, same basis lb. .07⅛- —
Cyls., l.c.l., t.l., same basis lb. .15 - —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 - 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works. unit-ton. 2.95 - —
Nitromethane, dms., t.l., dlvd. E lb. .25 - —
dms., l.t.l., dlvd. E lb. .26½- —

Nitromethane prices West of Rockies are 1c higher.

a-Nitronaphthalene, bbls., frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 - —
dms., l.c.l., frt. alld lb. .47 - —
1-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .23½- —
dms., l.c.l., same basis lb. .25 - —
tanks, same basis lb. .21 - —
2-Nitropropane, dms., c.l., frt. alld. E of Rockies lb. .18½- —
dms., l.c.l., same basis lb. .20 - —
tanks, same basis lb. .16 - —

Nitropropane prices West of Rockies are 1c. per lb. higher.

m-Nitrotoluene, tech., dms., frt. alld. lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld lb .15 - —
dms., l.c.l., frt alld. lb. .16 - —
tanks, frt. alld. lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms., l.c.l., works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms., l.c.l., works lb. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 - —
Nonylphenol, dms., c.l., frt. alld. lb. .22 - —
dms., l.c.l., frt. alld lb. .23 - —
tanks, frt. alld. lb. .19½- —

Nonylphenol prices on shipments to Western States are 2c. higher.

Nutmegs, East Indian, whole, bgs. lb. 1.36 - —
West Indian, bgs lb. 1.30 - —
Nutmeg oil, USP, dist., East Indian, cns lb. 9.00 -12.00
West Indian, cns. lb. 9.00 -12.00
Nux vomica, bls. lb. .20 - —
Powd., bbls., bxs. lb. .20 - .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms. lb. .46 - .48
Octane, indust., tanks, Bayonne, N.J. gal. .20 - —
Borger, Tex. gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .43½- —
dms., l.c.l., dlvd. Zone 1—lb. .45½- —
tanks, dlvd., Zone 1 lb. .41 - —
Octyl alcohol, perfumers grade, bots. lb. 1.60 - 3.25
Octyl alcohol, tech, (see 1-Octanol, tech).
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½- —
dms., l.c.l., same basis lb. .55 - —
Octyl phenol, bgs., c.l., works lb. .22 - —
bgs., l.c.l., works lb. .22½- —
tanks, works lb. .21 - —
Octyl phenol in dms., 11c. higher.

OILS
Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .16 - .16½
tanks lb. .14 - —
Oleic acid, dbl.-dist. (white), dms. lb. .17½- .20
tanks lb. .15 - —
S.d., dms. lb. .16¼- .18¾
tanks lb. .15¾- —
Oleo oil, extra, dms. lb. .14¾- —
Oleostearine, dms. lb. .12½- .12¾
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .15 - .20
Tears, cs. lb. .22 - .30
Olibanum oil, bots lb. 5.00 - 7.65
Extra fine, bots lb. 8.00 - 9.50
Olive oil, edible, dms., spot, duty-paid gal. 2.30 - 2.35
Olivine, crude, works ton.12.00 - —
20 mesh, works ton.15.00 - —
100 mesh works ton.20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz.19.20 - —
gran., cns., 50 lbs., same basis. oz.21.65 - —
powd., cns., 50 lbs., same basis. oz.21.65 - —
Orange oil, sweet distilled, Calif., cns., dms lb. .60 - —
Florida, cns., dms lb. .35 - —
Expressed, Calif., cns., dms lb. .70 - .90
Florida, cns., dms lb. .45 - .50
Messina, cns. lb. 3.25 - 5.00
West Indian, bitter, cns., dms. lb. 2.50 - 3.25
Orange peel, bitter, Haitian, bls lb. .18 - .20
Sweet lb. .28 - .30
Origanum oil, Spanish, cns lb. 1.80 - 2.30

ORANGE PIGMENTS
Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Orris root, Florentine, bls lb. .55 - —
powd., bbls., bxs lb. .65 - —
Verona, bls lb. .35 - —
powd., bbls., bxs lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots. gram. 3.00 - 4.00
Ouricury wax, crude, bgs. lb. .53 - .55
Refd., pure, bgs. lb. .61 - .62
Oxalic acid, bgs., dms., c.l., works. lb. .18 - .18½
bgs., dms., 10,000-lb. lots, works. lb. .18¼- .18¾
bgs., dms., smaller lots, works. lb. .19¼- .19¾
b-Oxynaphthoic acid, pigment manufacture, dms., frt. alld lb. .912 - —
Dyestuff manufacture, dms., same basis lb. 1.03 - 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb. 4.75 - 5.00
cns., smaller lots, works lb. 4.92 - 5.17

P

Palm oil, clarif., dms lb. .1440- .1540
tanks lb. .1160- —
Palm oil acid, dist., dms. lb. .15¾- .19½
tanks lb. .13¾- .14¼
Palmarosa oil, cns. lb. 4.45 - 6.00
Papain, powd., bots. lb. 5.50 -10.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns oz. 7.10 - 7.35
Paprika, Bulgarian, bgs. lb. .25 - —
Hungarian, bgs. lb. .29 - —
Spanish, bgs. lb. .34 - —
Yugoslavian, bgs. lb. .29 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. lb. 1.21 - —
Chlorinated, kgs. lb. 1.36 - —
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0655- —
Paraffin, fully refd., 122°-124°F., ASTM, tanks, refy lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
132°-134°F., ASTM, tanks, refy. lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —

AMP temperatures are an arbitrary 3°F. higher than ASTM.

Paraffin oil, pale, 100-110 vis., at 100°F., tanks east coast refy gal. .14 - —
Paraffin wax (see Paraffin)
Paraformaldehyde, 91% flake, bgs., c.l., frt. alld lb .10 - —
bgs., l.c.l., frt. alld lb. .12 - .13
91% powd., bgs., c.l., ex whse lb. .1715- —
bgs., l.c.l., ex whse lb. .1865- —
USP-X, fib. dms., c.l. lb. .19 - —
fib dms., 1,000-lb. lots lb. .20 - —
fib dms., smaller lots lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd lb. .14 - —
55-gal. dms., l.c.l., dlvd lb. .15 - —
tanks, dlvd. lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, ethyl, dms., frt. alld lb. .84 - —

Parathion prices 2c. per lb. higher in West.

Paratoluenesulfonamide (see p-Toluenesulfonamide).
Paris green, dealers, 100 lb. dms., frt. alld lb. .45 - —
Passion flower herb, bls. lb. .45 - .50
Patchouli oil, imp., cns. lb. 5.50 - 6.50
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd. E. of Rockies lb. 1.00 - —

Peacock blue price 1c. higher W. of Rockies.

Peanut meal, old process, 45%, bgs., f.o.b. mills ton.57.00 - —
solvent, same basis ton.51.00 - —
Peanut oil, crude, tanks, f.o.b. mills. lb. .16½- —
Refd., dms. lb. .21¾- .22
tanks lb. .19¾- —
Pectin, dom., NF, citrus, powd., bbls. lb. 2.05 - 2.06
Dom., tech., powd., 150 jelly grade, bbls. lb. 1.28 - —
Imp., Danish, bbls., ex whse lb. 1.28 - —
Pelargonic acid, dms., c.l., dlvd. lb. .25 - —
ton lots, same basis lb. .27½- —
tanks, same basis lb. .23½- —
Penicillin, potassium, cryst., bulk, 1,000,000 units. .021 - —
Penicillin, procaine, cryst., bulk, 1,000,000 units. .023 - —
Pennyroyal oil, USP, imported, cns. lb. 1.95 - 2.25
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., l.c.l., same basis lb. .22½- .29
Pentachlorophenol in dms. 1c, higher.
Pentaerythritol, tech., bgs., c.l., dlvd lb. .31 - —
bgs., l.c.l., dlvd. lb. .32 - —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy, gal. .14 - —
Pentobarbital, dms., 100 lbs. or more lb. 6.00 - —
Pepper, black, Malabar, bgs lb. .60 - —
Lampong, bgs. lb. .60 - —
Red, Funtuas, bgs. lb. .32 - —
Japanese, Hontoka, bgs. lb. .37½- —
Santaka, bgs. lb. .31½- —
Sudanese, bgs. lb. .36 - —
White, Muntok, bgs lb. .80 - —
Peppermint leaves, dom., USP, bls., dms lb. .70 - .75
Imp., USP, bls. lb. .85 - —
Peppermint oil, nat., dms. lb. 4.00 - 4.60
Redist., USP, dms. lb. 4.25 - 5.25
Perchloroethylene, dms., c.l., or t.l., dlvd lb. .13½- —
dms., l.c.l., dlvd. lb. .15¼- —
tanks, dlvd. lb. .11¾- —
tanktruck, 1,000 gal. min. dlvd. lb. .12¼- —
Peri acid, dry, bbls., frt. alld lb. 1.60 - —
Paste, bbls., frt. alld lb. 1.55 - —
Peru balsam, dms. lb. 1.10 - 1.50
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns., dms lb. 2.40 - —
Petrolatum, cream, dms., c.l., refy. lb. .08125- —
dms., l.c.l., dlvd. lb. .10125-.11375
tanks, refy. lb. .05875- —
Extra amber, dms., c.l., refy lb. .07125- —
dms., l.c.l., dlvd. lb. .09125-.10375
tanks, refy. lb. .04875- —
Petrolatum, lily white, dms., c.l., refy lb. .08625- —
dms., l.c.l., dlvd. lb. .10625- .12
tanks, refy. lb. .06735- —
USP, snow white, dms., c.l., refy. lb. .09125- —
dms., l.c.l., dlvd lb. .11125- .125
tanks, refy. lb. .06875- —
Petrolatum, USP, soft yellow, dms., c.l., refy lb. .07125- —
dms., l.c.l., dlvd. lb. .095 - .10375
tanks, refy. lb. .04875- —
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS
Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works. lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55%, sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms., c.l., frt. alld. E lb .91 - —
dms., l.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms. same basis lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lbs., frt. alld lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld. E. of Rockies lb. .16¾- —
non-ret. dms., l.c.l., same basis. lb. .17¾- —
tanks, same basis lb. .14¾- —
82-84% (cresol 16-18%) non-ret. dms., c.l., same basis lb. .16½- —
non-ret dms., l.c.l., same basis. lb. .17½- —
tanks, same basis lb. .14½- —
30°C., or above, tar dist., non-ret. dms., c.l., same basis lb. .18 - —
Phenol, 30°C., or above, tar dist., non-ret. dms., l.c.l., same basis. lb .19 - —
tanks, same basis lb. .16 - —
USP, syn., dms., c.l., t.l., frt. alld lb. .18½- —
dms., same basis lo. .20½- —
tanks, same basis lb. .16½- —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld lb. 1.30 - —
250-lb dm., same basis lb. 1.35 - —
Phenothiazine drench, fib. dms., t.l., dlvd lb. .44 - —
fib. dms., l.t.l., same basis lb. .47 - —
NF, fib. dms., t.l., same basis lb. .43 - —
fib. dms., l.t.l. same basis lb. .46 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots. lb. 2.35 - —
100%, bots. lb. 4.00 - 4.65
Phenylacetic acid, pure, cryst., cns. lb. 1.25 - 1.75
dl-Phenylalanine, dms., works lb.27.00 -37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb. lots, dlvd. E lb. 3.45 - —
fib dms., smaller lots, dlvd. E lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb. .41 - —
dms., l.c.l., dlvd. E. lb. .42½- —
tanks, dlvd. E. lb. .38½- —
m-Phenylenediamine, dms., frt. alld. lb. 1.10 - —
o-Phenylenediamine, coml. fib. dms, 100 to 1,000 lbs., works. lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms, works lb. 1.55 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms., l.c.l., same basis lb. .77 - —
Phenylethyl acetate, bots. lb. 1.25 - 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 - 1.50
Standard, dms. lb. 1.10 - 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld. lb. 1.50 - —
dms. smaller lots, frt. alld lb. 1.70 - 1.85
Phenylethylphenyl acetate, bots. lb. 4.00 - 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine, 97%, 450-lb. dms. lb. 1.48 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E. 1.80 - —
fib. dms., smaller lots, dlvd. E lb. 2.10 - —
o-Phenylphenol, dms., l.c.l., works. lb. .48 - .80
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., l.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¾- .26
nubs, bgs. lb. .33¼- .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .20 - .24
Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
CP, bots., works lb.17.75 - —
Tech., fib dms., works lb.10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works lb. .15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton.48.00 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines. short-ton. 5.298 - —
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.648 - —
70-72%, b.p.l., bulk, c.l., same basis short-ton. 6.228 - —
74-75%, b.p.l., bulk, c.l., same basis short-ton. 7.128 - —
76-77%, b.p.l., c.l., bulk, same basis short ton. 8.018 - —

Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.59.

Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., l.c.l., same basis 100 lbs. 7.25 - 7.75
tanks, t.w., works 100 lbs. 5.60 - —
80%, cbys., c.l., frt. equald 100 lbs. 7.85 - —
cbys., l.c.l., works 100 lbs. 8.10 - 9.35
tanks, t.w., works 100 lbs. 6.00 - —
NF, 85%, cbys., c.l., works. 100 lbs. 8.50 - —
cbys., l.c.l., works 100 lbs. 8.75 - 9.00
tanks, t.w., works 100 lbs. 6.65 - —
Phosphorus, amorph., red, dms., t.l., works lb. .55 - —
dms., smaller lots, works lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20¼
dms., l.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald. lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works, frt. equald lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½- —
dms., l.c.l., works lb. .14½- .15¼
Solid, dms., c.l., works lb. .11½- —
dms., l.c.l., works lb. .12½- .13¼
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms., l.c.l., works lb. .1475- .1675
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 - —
dms., l.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .19 - .23
bgs., l.c.l., same basis lb. .20 - .24
tanks, same basis lb. .18½- .22½
Phthalimide, 97-98%, dms., frt. alld lb. .65 - —
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies. lb. 2.90 - —
Resinated, bbls., same basis lb. 2.75 - —
Water dispersable, bbls., same basis lb. 1.52 - —

Pythalocyanine blue prices 1c. higher W. of Rockies.

Phthalocyanine green toner, bbls., works lb. 3.35 - —
Resinated, bbls. lb. 3.00 - —
Water dispersable, bbls. lb. 1.71 - —

Phthalocyanine green prices 1c. higher W. of Rockies.

Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more lb. 5.00 - —
NF, fib. dms. lb. 5.20 - —
a-Picoline, dms., c.l., works, frt. equald lb. .42 - .46
dms., l.c.l., works, frt. equald lb. .422 - .46¼
tanks, same basis lb. .41½- .43
b-Picoline, 98%, dms., t.l., works. lb. 1.05 - —
dms., l.c.l., same basis lb. 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline, 5°C, dms., c.l., works. lb. .32½- —
dms., l.c.l., works lb. .33 - —
g-Picoline, dms., f.o.b., works lb. 1.60 - —
tanks, t.l., same basis lb. 1.50 - —
Picric acid, NF, bbls. lb. .85 - —
Tech., bbls. lb. .44 - —
Pigment green B, kgs. lb. 1.50 - —
Pilocarpine hydrochloride, USP, bots oz. 5.25 - —
Pilocarpine nitrate, USP, bots., vials, oz. 5.15 - —
Pimento, Jamaican, bgs. lb. .68 - —
Mexican, bgs. lb. .57 - —
Pimento berry oil, NF, dms. lb. 3.75 - 9.25
Pimento leaf oil, crude, cns. lb. 2.20 - 2.60
Pine oil, dest.-dist., dms., l.c.l. works lb. .15 - —
dms., l.c.l. ex whse. New York. lb. .173 - —
Steam-dist., dms., ex whse., New York lb. .185 - —
dms., dlvd. lb. .188 - —
Pineneedle oil, Siberian (see Abies Siberoca oil).
Pinetar, retort, dms., c.l., works lb. .0611- —
dms., l.c.l., works lb. .0684- —
dms., c.l., ex whse., New York. lb. .0795- —
tanks, works lb. .0511- —
Pinetar oil, coml., dms., c.l., works. lb. .0611- —
dms., l.c.l., works lb. .0684- —
dms., c.l., ex whse., New York. lb. .0795- —
tanks, works lb. .0511- —
NF, rectified, dms., incl., l.c.l., works, South lb. .40 - —
dms., l.c.l., ex whse., New York lb. .41½- —
Pinetar oil, refd., dms., incl., l.c.l., works lb. .35 - —
dms., incl., l.c.l., ex whse, New York lb. .36½- —
Pink root, bls. lb. 1.75 - —
Piperazine, anhyd., dms., c.l., frt. alld lb. 1.80 - —
dms., l.c.l., same basis lb. 1.85 - —
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld lb. 1.15 - —
Piperazine dihydrochloride, 51%, dms., 1,000 lbs. or more, frt. alld lb. 1.23 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs or more, frt. alld lb. .86 - —
dms., 200-900 lbs., frt. alld. lb. .89 - —

Piperazine phosphate, 42%, dms., 1,000 lbs. or more, frt. alld.	lb.	1.06 - —
Piperidine, dist., 98% min., dms., c.l., t.l., frt. equald	lb.	2.55 - —
Piperonyl butoxide, dms., dlvd. E	lb.	4.50 - 5.05

PITCHES

Pitch quotations are listed individually For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).		
Platinum metal, works	oz.	81.00 -85.00
Pleurisy root, bls.	lb.	.45 - .50
Podophyllum resin, NF, dms.	lb.	12.50 - —
Poke root, bls.	lb.	.19 - .22
Polymyxin, bots., bulk., 50 billion units or more	1,000,000 units.	.52 - —
bulk, bots., 25-50 billion units.	1,000,000 units.	.54 - —
bulk, bots., 1-25 billion units.	1,000,000 units.	.56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works	lb.	.42 - —
dms., 10,000-20,000-lb. lots, works.	lb.	.44 - —
dms., smaller lots, works	lb.	.47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works	lb.	.42 - —
dms., 10,000-20,000-lb. lots, works	lb.	.44 - —
dms., smaller lots, works	lb.	.47 - .49
Pontianak copal gum, chips, bgs	lb.	.25 - —
Nubs, bgs.	lb.	.37 - .40
Poppy seed, Argentine, bgs.	lb.	No stocks.
Dutch, bgs.	lb.	.18 - —
Danish, bgs.	lb.	.17 - —
Polish, bgs.	lb.	.18 - —
Turkish, bgs.	lb.	.14 - —
Potash, caustic, liq., 45% basis, dms., c.l., works	100 lbs.	4.25 - —
dms., l.c.l., same basis	100 lbs.	5.05 - —
tanks, same basis	100 lbs.	3.70 - —
reg., flake, 88-92%, dms., c.l., same basis	100 lbs.	9.55 - —
reg., flake, 88-92%, dms., l.c.l., same basis	100 lbs.	10.60 - —
solid, 88-92%, dms., c.l., works.	100 lbs.	9.10 - —
dms., l.c.l., works	100 lbs.	10.15 - —
Potassium acetate, NF, 200-lb. dm., f.o.b. works, E	lb.	.31 - —
Potassium bicarbonate, USP, gran. dms	lb.	.22 - —
powd., dms.	lb.	.24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works	lb.	.18 - —
bgs., l.c.l., works	lb.	.18½- .19¾
Potassium bichromate in dms. ¾c. higher.		
Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald	lb.	.37 - —
100-lb. bgs., 5,000 lbs., 1 shipt., same basis	lb.	.38 - —
100-lb. bgs., smaller lots, same basis	lb.	.40 - —
Potassium borohydride, powd., dms., works	lb.	16.00 -22.00
Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb. lots.		
Potassium bromate, dms., 1,000-lb. lots or more, works	lb.	.50 - —
dms., smaller lots, works	lb.	.52 - .62
Potassium bromide, USP, gran., bbls., kgs	lb.	.39 - .40
Potassium carbonate, dom., NF, gran., bbls., dms	lb.	.20 - —
Dom., tech., powd., bbls., dms	lb.	.21 - .22
Dom., calcinated, bgs., c.l., works.	100 lbs.	8.50 - —
bgs., l.c.l., same basis	100 lbs.	9.55 - —
Dom., hydrated, 83-85%, bgs., c.l., works	100 lbs.	7.10 - —
bgs., l.c.l., works	100 lbs.	8.15 - —
Potassium chlorate, cryst., dms., c.l., works	lb.	.12¼- —
dms., l.c.l., works	lb.	.13½- .14½
Powd., dms., c.l., works	lb.	.12¾- —
dms., l.c.l., works	lb.	.14 - .15
	works lb.	.12¼- —
Potassium chlorate, NF, cryst., dms., 2,000 lbs. or more, works	lb.	.16¾- —
NF, gran., 25-lb. metal dms	lb.	.36 - —
NF, powd., dms., 2,000 lbs. or more, works	lb.	.17¼- —
Potassium chloride, indust., 99.9% KCL, bulk, c.l., works	ton.	29.00 - —
bgs., c.l., works	ton.	33.50 - —
99.3% KCL, bulk, c.l., works.	ton.	28.00 - —
bgs., c.l., works	lb.	32.50 - —
USP, cryst., dms.	lb.	.20 - .22
USP, gran., dms.	lb.	.21 - .23
USP, powd., dms.	lb.	.24 - .26
Potassium chloride agricultural (see Potassium muriate).		
Potassium chromate, tech., dms., works	lb.	.50 - .51
Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E	lb.	.43 - —
powd., 250-lb dms., same basis.	lb.	.46 - —
Potassium cyanide, dms., 20,000-lb. lots or more, works	lb.	.42½- —
dms., 2,000-19,999-lb. lots, works.	lb.	.43 - —
dms., smaller lots, works	lb.	.44 - .44½
Potassium dichromate (see Potassium bichromate).		
Potassium ferricyanide, dms., ton lots, works	lb.	.50 - —
dms., smaller lots, works	lb.	.65 - —
Potassium ferrocyanide, dms., ton lots	lb.	.24½- —
dms., smaller lots	lb.	.29 - —
Potassium fluoborate, fib. dms., c.l., works	lb.	.30 - —
fib. dms., l.c.l., works	lb.	.31 - —
Potassium fluoride, dms., works	lb.	.37 - .38
Potassium gluconate, 100-lb. dm., f.o.b. works E	lb.	1.67 - —
Potassium guaiacol sulfonate, NF, dms	lb.	2.10 - 2.30
Potassium hydroxide, tech. (see Potash caustic).		
Potassium hydroxide, USP, pellets, 100-lb. dms., 1 to 100-dm. lots	lb.	.33½- .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots	lb.	1.38 - —
Potassium iodide, USP, cryst., gran., or powd., 250-lb. dm., f.o.b. works	lb.	1.40 - —
Potassium manure salt, min. 20% K_2O, bulk, c.l., works,	unit-ton.	.17 - .1765
Potassium metabisulfite, gran., dms.,	lb.	.16 - —
Powd., dms.	lb.	.27 - —
Potassium muriate, standard, bulk, c.l., works	unit-ton.	.33 - .35
bagged 60% minimum K_2O, same basis	ton.	24.80 -26.00
Gran., bulk, c.l., works	unit-ton.	.34 - .36
bagged, 60% minimum K_2O, same basis	ton.	25.40 -26.40
Inside prices apply to material contracted for prior to July 1, 1959.		
Outside prices apply to material contracted for after that date but also for delivery during the current month.		
Potassium nitrate, NF, cryst., bbls., 20-ton lots	100 lbs.	17.00 - —
bbls., smaller lots	100 lbs.	18.00 -19.00
gran., bgs., 20-ton lots	100 lbs.	9.50 - —
bgs., smaller lots	100 lbs.	11.00 -12.00
powd., bgs., 20-ton lots	100 lbs.	10.50 - —
bgs., smaller lots	100 lbs.	12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works E	lb.	.32 - —
Potassium pentaborate, gran., dms., c.l., works	ton.	219.50 - —
dms., ton lots, ex whse	ton.	311.00 - —
dms., smaller lots, ex whse	ton.	316.00 - —
Powdered potassium pentaborate $10 per ton higher.		
Potassium perchlorate, dms., c.l., works	lb.	.18½- —
dms., l.c.l., works	lb.	.19 - .20
Potassium permanganate, coml., kgs., works	lb.	.25 - .33
USP, dms., works	lb.	.29 - .35
Potassium persulfate, dms., c.l., works	lb.	.17½- —
dms., l.c.l., works	lb.	.18 - .21
Potassium pyrophosphate, tetrabasic, dms., works	lb.	.15½- .18½
Potassium prussiate red (see Potassium ferrocyanide).		
Potassium prussiate yellow (see Potassium ferro-cyanide).		
Potassium silicate, electrical grade, 30° Be, 1.2.0, dms., c.l., works	100 lbs.	6.50 - —
dms., l.c.l., 5 dm. lots or more, works	100 lbs.	7.25 - 7.65
tanks, works	100 lbs.	6.15 - —
Potassium silicate, electrical grade, 40.5° Be, 1:2.1, dms., c.l., works	100 lbs.	5.95 - —
dms., l.c.l., 5 dm. lots or more, works	100 lbs.	6.70 - —
tanks, works	100 lbs.	5.60 - —
Potassium silicate, glass grade, bgs., c.l., works	100 lbs.	17.30 -18.00
bgs., l.c.l., works	100 lbs.	17.80 - —
Soln., 29° Be, 1:2.5, dms., c.l., works	100 lbs.	4.95 - —
dms., l.c.l., 5-dm. lots or more, works	100 lbs.	5.70 - —
tanks, works	100 lbs.	4.60 - —
Potassium silicofluoride, bgs., works.	lb.	.09½- .10
Potassium silicofluoride in drums, 0.4c. per lb. higher.		
Potassium stannate, dms., frt. alld. E	lb.	.793 - .866
Potassium sulfate, min. 50% K_2O, agricultural, bulk, c.l., works	unit-ton.	.62½- .64½
Inside price applies to tonnage contracted for prior to July 1, 1959.		
Outside price applies to tonnage contracted for after that date but also for delivery during the current month.		
Potassium sulfate, NF VII, cryst., dms.,	lb.	.31 - .33
NF VII, gran., dms	lb.	.18½- —
NF VII, powd., dms	lb.	.16 - .17
Potassium sulfocyanate, NF, cryst., (see Potassium thiocyanate).		
Potassium thiocyanate, NF, cryst., dms., works	lb.	.96 - .98
Tech., dms., works	lb.	.77 - .79
Potassium titanate, ctns., c.l., works.	lb.	.16¼- —
ctns., 5-ton lots, works	lb.	.16½- —
ctns., 1-ton lots or less, works	lb.	.16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price.	ton.	13.45 - —
bulk, works, July forward	ton.	14.00 - —
Potassium-sodium tartrate, NF, gran. or powd., 250-lb. dms., c.l., works E	lb.	.42½- —
250-lb. dms., 5,000-lb. lots, same basis	lb.	.43 - —
250-lb. dms., same basis	lb.	.43½- —
Potassium-titanium fluoride, fib. dms., works	lb.	.39 - .40
Potassium-zirconium flouride, fib. dms., c.l., works	lb.	.50 - —
fib. dms., l.c.l., works	lb.	.52½- .55
Pregnenolone, bots.	gram.	No prices.
Pregnenolone acetate, bots.	gram.	No prices.
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots, frt. alld	lb.	2.25 - —
USP, ampule grade, dms., 1,000-lb. lots, frt. alld	lb.	2.40 - —
dms., 500 lbs	lb.	2.45 - —
dms., 100 lbs	lb.	2.50 - —
Progesterone, USP, bots	gram.	No prices.
Pregnenolone acetate, bots	gram.	No prices.
Propenyl guaethol, dms.	lb.	24.30 -27.00
b-Propriolactone, dms., c.l., t.l., f.o.b. works	lb.	.89 - —
dms., l.c.l., l.t.l., same basis	lb.	.90 - —
tanks, same basis	lb.	.87 - —
Propionic acid, syn., pure, dms., c.l., works	lb.	.23¼- —
dms., l.c.l., works	lb.	.24¾- —
tanks, works	lb.	.20¾- —
n-Propyl acetate, dms., c.l., dlvd.	lb.	.14¾- —
dms., l.c.l., dlvd	lb.	.16¼- —
tanks, dlvd.	lb.	.12¼- —

MONTROSE

CHEMICAL COMPANY

100 LISTER AVENUE
NEWARK, NEW JERSEY

Dimethyl Isophthalate

Trimethyl Borate — Trimethoxy Boroxine

T.C.P. — Tricresyl Phosphate

Cresyl Diphenyl Phosphate

D.D.T. — Dichloro Diphenyl Trichloroethane

Ethyl Silicate 28% — 40%

D.D.V.P. — Dimethyl Dichloro Vinyl Phosphate
(Minimum 95% Purity)

Triphenyl Phosphate

EXCLUSIVE SALES AGENTS

R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

n-Propyl alcohol, dms., c.l., divd lb. .14 - .15
dms., l.c.l., divd lb. .15½- .16½
tanks, divd lb. .11½- .12½
n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb. 3.90 - 4.40
n-Propyl-p-hydroxbenzoate, USP, dms lb. 2.30 - 2.40
Propyl thiouracil bots., 50 kilo lots or more kilo.55.00 - —
bots., smaller lots kilo.55.10 - 55.30
n-Propylamine, dms., c.l., divd lb 1.24 - —
dms., l.c.l., same basis lb. 1.255 - —
n-Propylene dichloride consumers', dms., c.l., divd, E lb. .0845- —
dms., l.c.l., same basis lb. .0995- —
tanks, same basis lb. .07 - —
Propylene dichloride prices in West 1c. higher, same basis
Propylene glycol, indust., dms., c.l., divd, E lb. .15 - —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12½- —
USP, dms., c.l., divd, E lb. .17 - —
dms., l.c.l., same basis lb. .18¾- —
Propylene glycol methyl ether, dms., c.l., divd lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Propylene oxide, dms., c.l., divd, E, lb. .17 - —
dms., l.c.l., divd, E lb. .18½- —
tanks, divd, E lb. .14½- —
Psyllium seed, black, bgs lb. .30 - .35
Blonde, bgs. lb. .18 - .20
Husks, bgs. lb. .42 - .45
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾- .04¼
bgs., smaller lots lb. .03¾- —
Imp., Italian, silk-screen, coarse, bgs. ton lots lb. .06½- —
fine, bgs., ton lots lb. .04 - —
sun dried, coarse, bgs ton.60.00 - —
fine, bgs. ton.60.00 - 70.00
Pumpkin seed, bgs lb. .25 - .26
Pyrethrins, syn (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works, gal. 9.60 - 9.80
Pyrethrum liquid, 100/1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal.45.90 - 46.90
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb.11.00 - 11.35
purif, 20%, dms., works lb.11.00 - 11.35
Pyridine, denat., dms., c.l., works and frt. equald gal. 2.55 - —
dms., l.c.l., same basis gal. 2.70 - —
Refd., 2°, non-ret. dms., c.l., same basis lb .69½- —
dms., l.c.l., same basis .70 - —
tanks, same basis lb. .65 - —
Pyridoxine hydrochloride, USP, 500-gram bots., dms., f.o.b. works kilo.175.00 - —
Pyrites, Canadian, 48-50% S, mines, long-ton. 5.00 - 6.00
Pyrocatechol (see Catechol).
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls., 100-lbs., f.o.b., works lb. 3.50 - —
Pyrogallol, NF, 100-lb. dms lb. 3.50 - —
Pyroxylin, USP, bots lb. 9.50 - —

Q

Quassia chips lb. .10 - —
Quicksilver (see Mercury metal).
Quince seed, bgs lb. 1.30 1.40
Quinidine sulfate, USP, 1,000-oz. dm oz. .74½- —
Quinine, NF, 1,000-oz. dm oz. .3105- —
Quinine bisulfate, USP, 1,000-oz. dm. oz. .2330- —
Quinine hydrochloride, 1,000-oz. dm. oz. .3030- —
Quinine sulfate, USP, 1,000-oz. dm. oz. .2575- —
Quinoline dms., c.l., frt. equald lb. .50¾- —
dms., l.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 - —

R

R salt paste, dms., frt. alld., 100% basis lb. .98 - —
Powd., frt. alld. 100% basis lb. 1.08 - —
Rapeseed oil, dms lb. .15 - .15½
tanks lb. .13 - —
Rare earth oxalate, NF, 45-50%, bgs, works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.00 - 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

RED PIGMENTS
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red).
Red toner, Lake C, alizanine, bbls., works lb. 1.25 - —
Reserpine, cryst. bots gram. 1.25 - —
Resorcinol, tech grade, dms., c.l., works, frt. equald lb. .77¼- —
dms., l.c.l., same basis lb. .78½- —
USP, powd., dms., works lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs., works lb. 6.00 - —
Tungstated, PTMA, works, kgs lb. 6.60 - —
Rhodinol, 5-lb. cans lb.42.00 - 51.00
Synthetic lb.14.00 - 16.00
Rhubarb root, India, whole, bgs lb. .25 - —
powd., bgs. lb. .35 - —
tanks, same basis lb. .14¼- —
Riboflavin, USP, fib. dms., kilo or more, divd kilo.36.00 - —
Riboflavin, USP, readily soluble, lots, divd kilo.13.00 - —
Riboflavin, 5-phosphate-sodium, fib. dms., kilo or more, divd, kilo.104.50 - —
Rice bran oil, clarified, dms., l.c.l. lb. .14 - .14½
tanks, divd, E lb. .12 Nom.
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate)
Roofing pitch (see Coaltar pitch roofing)
Rose oil, nat., Bulgarian, bots lb.1,152.60- —
Turkish, bots lb.650.00 -750.00
Rosemary oil, Spanish, NF, cns., dms lb. .97 - 1.40
Spanish, tech., cns., dms lb. .50 - 1.20
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib, dms., works unit-lb. .12 - —
Resin, 25-45%, fib, dms., works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .02¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F.-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Rue oil, bots lb. 2.75 3.00
Rutin, NF, fib, dms., 10 kilo lots, kilo.13.00 - —
fib, dms., 5 kilo lots kilo.13.50 - —
fib, dms., 1 kilo kilo.14.00 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib, dms., 1,000-lb lots, works lb. 2.50 - —
USP, gran., soluble, dms., 1,000-lb lots, works lb. 1.40 - —
dms., smaller lots lb. 1.50 - —
USP, powd., soluble, insoluble, dms., 1,000-lb lots lb. 1.45 - —
dms., smaller lots lb. 1.55 - —
Saccharin, USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.43 - —
dms., smaller lots lb. 1.53 - —
Safflower oil, dms., New York lb. .1755- .18
tanks, Atl. Coast lb. .1555- —
Saffron, Mancha Superior, tins lb.20.00 - —
Safrol, dms. lb. .65 - —
Sage, Dalmatian, bgs lb. .40 - —
Greek, cns. lb. .15 - —
Italian, cns. lb. .18 - —
Sage oil, clary, bots. lb.15.50 -17.00
Dalmatian, cns lb. 2.85 - 3.25
Spanish, cns lb. 1.25 - 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald lb. 1.23 - —
dms., l.c.l., same basis lb. 1.25 - —
Salicylamide, 100-lb. dms lb. 1.05 - —
Salicylic acid, tech., fib, dms., c.l., t.l., divd lb. .40½- —
fib, dms., l.c.l., divd lb. .44¾- —
Salicylic acid, USP, cryst., 200-lb. fib, dms., 1,000 lbs. or more lb. .51¾- —
200-lb. fib, dms., less than 1,000 lbs lb. .54¾- —
100-lb. fib, dms., 1,000 lbs. or more lb. .53¾- —
100-lb. fib, dms., less than 1,000 lbs lb. .56¾- —
USP, powd., 100-lb. fib, dms., 1,000 lbs. or more lb. .58¾- —
100-lb. fib, dms., less than 1,000 lbs lb. .61¾- —
Salol, NF, gran., bbls., kgs lb. 1.20 - —
Powdered salol, 25c. per lb. higher.
Salt, rock, paper bgs., c.l. 100 lbs. 1.09 - —
Salt, table vacuum, common, fine, paper bgs., c.l. 100 lbs. 1.34 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton.28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood, E. Indian, chips, bgs., lb. .55 - .66
powd., fib, dms lb. .75 - .76
Sandalwood oil, cns. lb.20.50 - —
Sarcosine, tech., tanks, f.o.b., works, frt. equald lb. 1.03 - —
lb. No stocks.
Sardine oil, crude, tanks, Pac. coast.
Sassafras oil, artif., dms lb. .45 - —
Nat., dom., dms lb. 1.40 - —
Savory oil, cns lb. 4.75 - —
Schaeffer's salt, paste, dms., frt. alld, 100% basis lb. .85 - —
Powd., bgs., frt. alld., 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, bots oz.13.00 - —
Sebacic acid, CP, bgs., c.l., works lb. .69½- —
bgs., l.c.l., works lb. .71½- —
Purified, bgs., c.l., works lb. .65½- —
bgs., l.c.l., works lb. .67½- —
Seidlitz mixture, fib, dms., 5,000-lb lots lb. .30½- —
fib dms., smaller lots lb. .31 - .32
Selenium, powd., 99½%, dms., divd lb. 7.00 - —
Senega root, bls lb. 3.00 - —
Senna leaves, Alexandria, whole and half, bls lb. .20 - .22
siftings lb. .16 - —
Tinnevelly, No. 1, bls lb. .22 - —
No. 2, bls lb. .18 - —
No. 3, bls lb. .14 - —
pods, bls. lb. .28 - —
powd, bbls., bxs lb. .17 - —
Serpentaria root, bls lb. 6.50 - —
Sesame oil, USP, dms lb. .38 - .39
Sesame seed, Colombian, bgs. lb. .15½- —
Lebanese, hulled, bgs lb. .19 - —
Nicaraguan, hulled, bgs lb. .14 - —
nat., bgs. lb. .14 - —
Salvadorian, Nat., bgs lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .46 - —
dms., l.c.l., works lb. .22 - .30¼
bbls., 1,500-lb. lots lb. .47 - —
kgs., 1,500-lb. lots lb. .48 - —
Bonedry shellacs prices for less than 1,500-lb. lots 1c. per lb. higher for all packages.
Shellac, bleached, refd., bgs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .37 - .39
lemon No. 2, bgs., 10-bg. lots lb. .34 - .37
superfine, bgs., 10-bg. lots lb. .32 - .34
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., l.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., l.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .04¾- .16¾
paper bgs., l.c.l., works lb. .07 - .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton.25.00 - —
bgs., l.c.l., works, ex whse ton.45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton.20.00 - —
bgs., l.c.l., works ton.25.00 - —
99½%, 140 mesh, bgs., c.l., works ton.15.00 - —
bgs., l.c.l., works ton.20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .16 - —
tanks, works lb. .17 - —
Silver bullion, ingots, cs., Troy oz. .91⅛- —
Silver cyanide, bots., 1,000-oz. lots, oz. .94¾- —
bots., 500-oz. lots oz. .95¼- —
bots., 100-oz. lots oz. .93¼- —
Silver nitrate, CP, cryst., bots., 1,000 to 3,000-oz., f.o.b. works oz. .67¼- —
bots., 250-500 oz., same basis. oz. 67¾- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.15 - —
Strong, NF, bots., dms., 1,000-oz. lots oz. 1.10 - —
Snakeroot oil, Canada, cns lb.40.00 -43.00
Soapbark, crushed, bls lb. .30 - .35
Powd., bls. lb. .35 - .40
Whole, bls. lb. .20 - .25
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., l.c.l., stock pts., 100 lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs., l.c.l., stock pts., 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 - —
liq., 50%, sellers' tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 - 3.00
Soda, caustic, flake, 73%, sellers' tanks, works, dry basis, 100 lbs. 3.00 - —
liq., 73%, rayon type, sellers' tanks, works, dry basis lb. 3.00 - 3.10
solid, 76%, dms., c.l., works, 100 lbs. 4.80 - —
Soda, sal, conc., bgs., c.l., works, 100 lbs. 2.50 - —
bgs., smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., divd, E lb. .14½- —
NF, 60%, gran., dms., c.l., works, lb. .15½- —
dms., l.c.l., works lb. .17½- —
Sodium alginate, NF, white powd., dom., 300 lbs. or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted lb. 1.90 - —
Sodium antimoniate, bgs., c.l., divd, E lb. .27½- —
bgs., l.c.l., divd, E lb. .29 - —
Sodium arsenate, 60% arsenic pentoxide, 200 lb. dm., less than ton lots, f.o.b. works lb. .24 - —
ton lots or more, same basis. lb. .23½- —
Sodium arsenite, 90% pink powder, 75% arsenious oxide, leaders, dms., ton lots or more, works lb. .17½- —
dms., less than ton lots, works lb. .18 - .19
Sodium ascorbate, dms., 25-50 kilo dms., f.o.b. works kilo.10.00 - —
10-kilo dm., same basis kilo.10.35 - —
5-kilo dm., same basis kilo.10.75 - —
1-kilo bot., same basis kilo.11.00 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., l.c.l., same basis lb. .39 - —
USP, dms., c.l., t.l., frt. alld. lb. .38 - —
dms., ton lots, same basis lb. .43 - —
dms., 1,000-lb. lots, same basis, lb. .45 - —
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 - —
bgs., l.c.l., works 100 lbs. 3.85 - —
USP, powd., bgs., c.l., works, 100 lbs. 2.55 - —
bgs., l.c.l., works 100 lbs. 3.45 - —
Sodium bichromate, gran., bgs., c.l., t.l., works lb. .13 - —
bgs., l.c.l., works lb. .13½- .14¾
Sodium bichromate in dms. ¾c. per lb. higher.
Sodium bifluoride, bbls., c.l., works, frt. equald lb. .19½- —
bbls., l.c.l., same basis lb. .2025- —
Sodium bisulfate, bulk, c.l., works, 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 - 3.60
dms., l.c.l., frt. equald 100 lbs. 3.50 - 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs. 5.00 - —
bgs., l.c.l., works 100 lbs. 5.45 - —
Soln., 35°, bbls., c.l., works 100 lbs. 1.70 - —
bbls., l.c.l., works 100 lbs. 2.20 - —
Sodium borate (see Borax).
Sodium borohydride, powd., dms., c.l., works lb.19.90 - —
dms., l.c.l., works lb.33.00 -40.00
Sodium borohydride, stabilized water soln., 12% NaBH, 100% basis, dms., works lb.15.00 - —
Pelletized sodium borohydride $1 per lb. higher in 1,000-lb. lots.
Sodium bromide, USP, gran., dms., works lb. .40 - —
Sodium carbonate, cryst., monohydrated (see Soda, sal).
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs. 3.10 - —
bgs., l.c.l., works 100 lbs. 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms., l.c.l., works lb. .09½- .10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb. .05 - —
Sodium chlorite, tech., dms., c.l., works lb. .58 - —
dms., 20-dm. lots or more, works. lb. .56 - —
dms., smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms., l.c.l., works lb. .28 - —
Sodium chromate, anhyd., fib, dms., c.l., t.l., works lb. .14¾- —
fib, dms., l.c.l., works lb. .15¼- .16½
Sodium chromate tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
bgs., l.c.l. lb. .1065- .1190
Sodium citrate, anhyd., 200-lb. dm., f.o.b works E lb. .62 - —
NF VIII, gran, bgs., c.l., same basis lb. .26 - —
USP XIV, gran., bgs., c.l., same basis lb. .29 - —
Sodium citrate, USP, powd. prices ¼c. higher.
Sodium cyanate, dms., 1,000-lb. lots, works lb. .85 - —
dms., smaller lots, works lb. .90 - 1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., works, 20,000-lb. lots lb. .176 - —
dms., same basis, 5,000 to 19,999-lb. lots lb. .188 - —
dms., same basis, 1,000 to 4,900-lb. lots lb. .198 - —
Sodium cyclamate, 100-lb. dm., f.o.b. works lb. 1.95 - —
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 - —
250-lb. dms., l.c.l., works lb. .16¾- —
Tech., 33-35% acetic acid, dms., l.c.l., works lb. .15 - —
250-lb. dms., l.c.l., works lb. .15¾- —
Sodium dimethyl dithiocarbamate, 40% soln., dms., c.l., t.l., frt. alld., 100% basis lb. .42 - .52
dms., l.c.l., t.l., same basis lb. .47 - —
tanks, same basis lb. .38 - —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs., smaller lots lb. .14½- —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
fib. dms., l.c.l., works, frt. equald lb. .1465- —
Sodium formate, bgs., c.l., works, 100 lbs. 7.65 - —
bgs., l.c.l., ex whse 100 lbs. 8.65 - —
Sodium gentisate, 100-lb. fib. dms. lb. 5.50 - —
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E lb. .84 - —
Tech., bgs., c.l., t.l., same basis lb. .34 - —
Sodium hydride, 50% soln. in oil, dms., works lb. 1.23 - 2.50
25% soln. in oil, dms., 50 lbs. or less, f.o.b. shipping point, lb. 2.20 - —
dms., 50-99 lbs., same basis lb. 1.77 - —
dms., 100-999 lbs., same basis lb. 1.20 - —
dms., 1,000 lbs. or more, same basis lb. .93 - —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite, dms., c.l., frt. alld lb. 23½- —
dms., l.c.l., frt. alld. lb. 25¼- —
Sodium hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots, lb. .23½- .28
Sodium hydroxide, tech. (see Soda, caustic).
Sodium hypophosphite, NF, dms., 1,000-lb. lots lb. .99 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dms., f.o.b. works lb. 1.98 - —
Sodium lauryl sulfate, dms., c.l., divd lb. .20½- —
dms., l.c.l., divd. lb. .21½- —
tanks, divd. lb. .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 - 6.50
l.c.l., bgs., works 100 lbs. 4.40 - 7.00
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate octahydrate, gran., bgs., c.l., works ton.210.00 - —
bgs., ton lots, ex whse 100 lbs. 8.00 - —
bgs., smaller lots, ex whse. 100 lbs. 9.25 - 11.25
Tetrahydrate, bgs., c.l., works, ton.210.00 - —
bgs., ton lots, ex whse 100 lbs.13.93 - —
bgs., smaller lots, ex whse. 100 lbs.15.18 - 17.18
Sodium, metallic, bricks, c.l., works, lb. .21 - —
Fused, 18,000-lb lots or more, works lb. .19½- —
tanks, works lb. .17 - —
Sodium metalinate, bbls., frt. alld. lb. .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt. 100 lbs.11.10 - —
bgs., l.c.l., same basis 100 lbs.11.85 - —
dms., c.l., same basis 100 lbs.11.70 - —
dms., l.c.l., same basis 100 lbs.12.45 - —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - —
bgs., 6,000-19,900 lb. lots, works. 100 lbs. 6.05 - —
dms., c.l., works 100 lbs. 6.20 - —
dms., l.c.l., works 100 lbs. 6.55 - —
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs. 4.45 - —
bgs., l.c.l., works 100 lbs. 4.80 - 6.75
dms., l.c.l., works 100 lbs. 4.95 - —
dms., l.c.l., works 100 lbs. 5.30 - 7.25
Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 - .99
Cryst., dms., works, frt. alld lb. .74 - .76
Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate, monohydrated).
Sodium naphthionate, bbls. lb. .72 - —
Sodium nitrate, dom., crude, bgs., c.l., works ton.48.00 - —
bulk, c.l., works ton.44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton.48.00 - —
bulk, c.l., same basis ton.44.00 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 9.00 - —
bbls., l.c.l., same basis 100 lbs.11.00 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works 100 lbs. 5.65 - —
bbls., l.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 88%, bgs., works, 100 lbs.12.35 - —
99%, bgs., works 100 lbs.15.40 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - —
dms., l.c.l., same basis lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 - —
dms., l.c.l., same basis lb. .26½- .33
Sodium pentabarbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs., l.c.l., works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., divd. E. of Miss lb. .21½- —
dms., l.c.l., same basis lb. .22 - .22¼
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 - —
Sodium phenosulfonate, USP, IX, gran., dms lb. .52 - .53
NF, powd., dms lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs. 7.95 - —
bgs., l.c.l., same basis 100 lbs. 8.35 - 9.40
Dibasic, cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.60 - —
bgs., l.c.l., frt. equald 100 lbs. 5.00 - 5.75
Dibasic, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 - —
bgs., l.c.l., same basis 100 lbs. 8.10 - —
USP, dried, powd., bgs., dms., works lb. .19 - .20½
Monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 - —
bgs., l.c.l., same basis 100 lbs. 9.40 -10.00
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 - —
bgs., l.c.l., frt. equald 100 lbs. 9.45 -10.05
Sodium phosphate in dms. 60c. to 80c. higher than bgs.
Sodium picramate, tech., paste, dms., f.o.b. works, frt. equald lb. .90 - —
Sodium propionate, any quantity, dms., divd. E. of Rockies, lb. .34½- —
Prices W. of Rockies 3c. per lb. more.
Sodium prussiate, yellow (see Sodium ferrocyanide).
Sodium pyrophosphate acid, bgs., c.l., works, frt. equald, 100 lbs.11.10 - —
bgs., l.c.l., same basis 100 lbs.11.85 12.35
Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., works lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.81 - —
bgs., l.c.l. same basis 100 lbs. 9.21 - 9.71
Sodium salicylate, USP, dms., 1,000-lbs. or more lb. .78½- —
dms., less than 1,000 lbs., dms. lb. .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —

Sodium sesquicarbonate, bgs., l.c.l., dlvd. zone 1..100 lbs. 4.10 - 4.35
dlvd. zone 2.....100 lbs. 4.35 - 4.60
dlvd. zone 3 .....100 lbs. 4.75 - 4.90
dlvd. zone 4 .....100 lbs. 5.35 - 5.60

Sales zones are (1) All states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss., south of 31°; Tex. E. of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

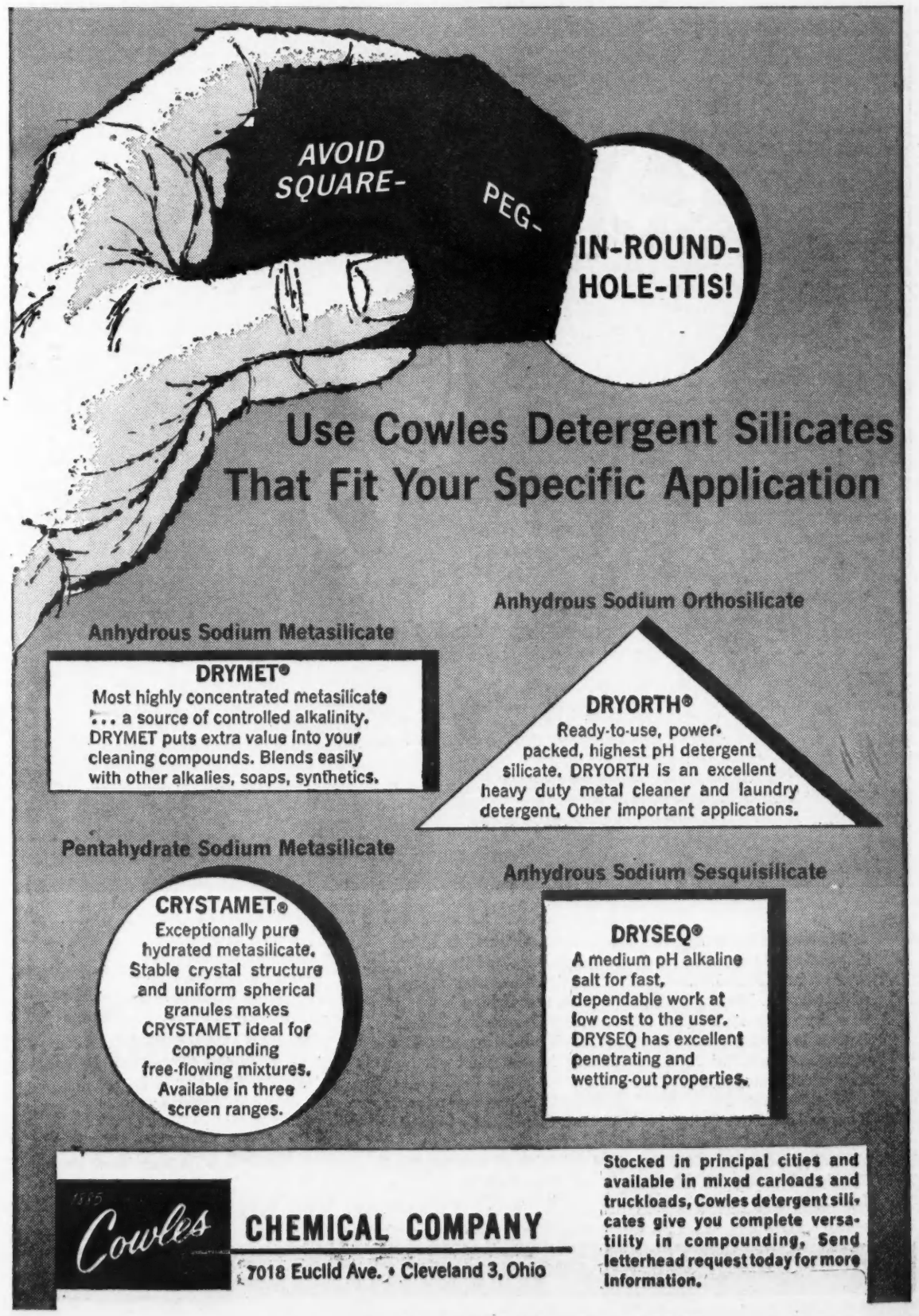
Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works..100 lbs. 5.70 - —
dms., c.l., t.l., works....100 lbs. 6.20 - —
Sodium sesquisilicate, hydrated, bgs., c.l., works..100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works..100 lbs. 5.35 - —
dms., c.l., works..100 lbs. 5.50 - —
dms., 6,000-19,900 lb. lots, works. 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be., 1:3.2, turbid, dms., c.l., works. 100 lbs. 1.65 - —
dms., l.c.l., works..100 lbs. 1.90 - 2.40
tanks, works .....100 lbs. 1.20 - —
47° Be., 1:29.9, turbid, dms., c.l., works..100 lbs. 2.25 - —
dms., l.c.l., works..100 lbs. 2.60 - 3.45
tanks, works .....100 lbs. 1.90 - —
52° Be, 1:2.4, turbid, dms., c.l., works..100 lbs. 2.65 - —
dms., l.c.l., works....100 lbs. 3.00 - 3.50
tanks, works .....100 lbs. 2.30 - —
Solid, 1.3.2, bgs., works.....ton.67.50 - —
Sodium silicofluoride, bgs., c.l., works..lb. .065 - —
bgs., l.c.l., works.....lb. .725- —

Sodium silicofluoride in dms., 0.4c. per lb. higher.

Sodium stannate, dms., works. frt. alld. E..lb. .652 - .712
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works..lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms..lb. .22½- —
Tech., anhyd., bgs., c.l., dlvd. E. ton.54.00 - —
Tech., detergent, rayon grade, bgs., c.l., works..ton.36.00 - —
bulk, c.l., works....ton.32.00 - —
USP, cryst., fib. dms. .....lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald..lb. .07¼- —
dms., l.c.l., same basis..lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis..ton.130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald..lb. .06 - —
dms., l.c.l., same basis.....lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald..lb. .05½- —
bbls., l.c.l., same basis.....lb. .06½- —
Sodium sulfite, anhyd., powd., bgs., c.l., works..100 lbs. 7.55 - —
bgs., l.c.l., same basis..100 lbs. 7.95 - —
Anhyd., tech., bgs., c.l., works. 100 lbs. 3.50 - —
bgs., t.l., same basis..100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works, frt. equald..lb. .04½- —
dms., l.c.l., same basis....lb. .05½- —
Sodium thiocyanate, CP, dms. ....lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works..lb. .317 - —
dms., less than ton lots, works..lb. .337 - —
Sodium thiosulfate, NF, cryst., bbls. lb. .13½- —
Tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald..100 lbs. 7.75 - —
100-lb. bgs., l.c.l., l.t.l., frt. equald..100 lbs. 8.15 - —
Sodium thiosulfate, tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald..lb. .0775- —
64-lb. bgs., l.c.l., l.t.l., frt. equald..lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald..100 lbs. 4.95 - —
Sodium thiosulfate, tech., pentahydrate, photo grade, 100-lb. bgs., l.c.l., l.t.l., frt. equald..100 lbs. 5.20 - —
Sodium titanate, ctns., c.l., works. lb. .14¼- —
ctns., 5-ton lots, works.....lb. .14½- —
ctns., 1-ton lots or less, works..lb. .14¾- —
Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E..lb. .35½- —
10-lb. cns., c.l., frt. alld. E....lb. .42 - —

Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.

Sodium tripolyphosphate, bgs., c.l., works, frt. equald..100 lbs. 8.16 - —
bgs., l.c.l., same basis....100 lbs. 8.56 - 9.06
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works..100 lbs. 8.95 - —
bgs., l.c.l., works.....100 lbs. 9.70 -13.13
dms., c.l., works.....100 lbs. 9.45 - —
dms., l.c.l., works.....100 lbs.10.20 -10.60
Sodium tungstate, tech., kgs., dlvd. E..lb. 1.32 - —
Sodium-ammonium phosphate, purif., cryst., dms., works..lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium - formaldehyde sulfoxylate, dms., c.l., dlvd..lb. .21 - —
dms., l.c.l., same basis.....lb. .21½- —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works..lb. .28 - —
fib. dms., smaller lots, same basis..lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt. equald..gal. .30 - .35½
Solvent naphtha, petroleum, straight aromatic, 310°-360°F. b.r., 14°-16°C. m.a.p., tankcars, New Jersey and New York..gal. .29 - —
Houston, Texas .....gal. .29 - —
355°-420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York. gal. .30 - —
Houston, Texas .....gal. .30 - —
Solvent naphtha, petroleum, partial aromatic, 211°-265°F. b.r., 31°C. m.a.p., tankcars, New Jersey and New York..gal. .235 - —
286°-340°F. b.r., 22°C. m.a.p., tankcars, New Jersey and New York..gal. .275 - —
319°-380°F. b.r., 27°C. m.a.p., tankcars, New Jersey and New York..gal. .27 - —
322°-395°F. b.r., 28°C. m.a.p., tankcars, New Jersey and New York..gal. .28 - —
Sorbital, powd., dms., c.l., works..lb. .36 - —
dms., 1 to 5-ton lots, works. lb. .28 - .30
Sorbital, soln., coml., equeous, dms., c.l., works..lb. .24¼- —
dms., ton lots, works....lb. .25 - —
dms., smaller lots, works..lb. .25¼- —
tanks, works .....lb. .23¼- —
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works..lb. .33 - —
Sorbitan monostearate, fib. dms., 10,000 to 20,000-lb. lots, works..lb. .35 - —
fib. dms., smaller lots, works..lb. .38 - .40
Sorbitan tristearate, fib. dms., 20,000-lb. lots, works..lb. .34 - —
fib. dms., 10,000 to 20,000-lb. lots, works..lb. .36 - —
fib. dms., smaller lots, works..lb. .39 - .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works..lb. .18 - —
dms., l.c.l., works.....lb. .19 - —
tanks, works .....lb. .16¼- —
cryst., resin grade, pellets, dms., c.l., works..lb. .23 - —
dms., 1 to 5-ton lots, works. lb. .25 - .26
Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 - —
bgs., l.c.l., works.....lb. .23¼- .23½
Chemically isolated, new process, bgs., c.l., works..lb. .20 - —
bgs., l.c.l., works.....lb. .20¼- .29½
Soybean meal, 44%, bulk, unrestricted, Decatur..ton.47.50 - —
Soybean oil, crude, tanks, Decatur. lb. .09¾- —
Foots, soapstock, acid 95%, tanks, N. Y..lb. .05¼- —
Refd., alkali, dms. .....lb. .1405- .1430
tanks .....lb. .1205- —
Clarified, dms. .....lb. .1355- .1380
tanks .....lb. .1155- —
Salad, dms. .....lb. .1380- .1405
tanks .....lb. .1180- —
Soybean oil acids, dbl. dist., dms., lb. .17 - .19½
tanks .....lb. .14½- —
S. D., dms. .....lb. .15¾- .18¼
tanks .....lb. .13¼- —
Sparteine sulfate, cns., 100 oz. or more..oz. .80 - —
Spearmint leaves, dom., bls.....lb. .75 - —
Spearmint oil, NF, dms. .....lb. 8.00 - 9.50
Sperm oil, bleached, winter, 45°, dms..lb. .1575- .1675
tanks .....lb. .1375- —
Nat., winter, 45°, dms.....lb. .1475- .1575
tanks .....lb. .1275- —
Spermaceti wax, blocks, cs.....lb. .31 - .33
Cakes, cs. .....lb. .32 - .34
Spruce oil, cns., dms. .....lb. 2.10 - 3.55
Squill, white, bls. .....lb. .16 - .18
Powd., bbls., bxs. .....lb. .17 - .20
St. John's bread, edible, bls. ....lb. .17 - —
Stannic chloride, anhyd., dms., works..lb. .822 - .844
Stannic oxide, dms., dlvd. .....lb. 1.11 - 1.12
Stannous chloride, annyd. dms., works..lb. 1.02 - 1.274
Hydrous, cryst., dms., works..lb. .88 - .89
Stannous sulfate, dms., works..lb. 1.073 - 1.093
Star root (see Helonias root).
Stargrass root (see Aletris root.)
Stavesacre seed, bgs. .....lb. .60 - .61
Stearic acid, dbl., pressed bgs..lb. .15¾- .18¼
Single-pressed, bgs., ...lb. .15¼- .17¾
Triple-pressed, bgs. .....lb. .17½- .20
Stearine, oleo (see Oleostearine.)
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York..gal. .18 - —
tanks, Houston .....gal. .1475- —
tanks, group 3.....gal. .12875- —
Stramonium leaves, bgs. .....lb. .13 - —
Streptomycin sulfate, bulk, gram. .035 - .036
Strontium bromide, NF, cryst., 100-lb. dm., f.o.b. E..lb. .92 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works.lb. .35 - —
dms., 1-ton lots, works.....lb. .37 - —
Tech., dms., works.....lb. .19 - —
Strontium chromate, fib. dms., dlvd. lb. .48 - —
Strontium iodide, jars, 25-lb. lots lb. 3.57 - —
Strontium nitrate, bgs., c.l., works. 100 lbs.11.00 - —
bgs., l.c.l., works .....100 lbs.12.00 - —
Strontium salicylate, NF, dms....lb. 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works. ton.56.70 -66.15
Strophanthin G (see Quabain, USP).
Strophanthin K, bots. .....oz.25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs..lb. 3.50 - 3.75
Styrax gum, USP, cs. .....lb. 4.50 - 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., frt. alld. lb. .17 - —
dms., l.c.l., same basis.....lb. .19 - —
tanks, same basis.....lb. .14½- —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Styrene Monomer—Tetrahydrofurfuryl Alcohol

Styrene monomer, tech., 99.2%, dms., c.l.	lb.	.1501-	—
dms., l.c.l., same basis	lb.	.1701-	—
tanks, bulk, same basis	lb.	.1251-	—

Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.

Styrolyl acetate, bots.	lb.	1.10	—
Succinic acid, purif., cryst., dms., t.l., frt. alld	lb.	.62	—
dms., l.t.l., same basis	lb.	.63	.75
Succinic anhydride, dms., c.l., t.l., dlvd	lb.	.51	—
dms., l.c.l., same basis	lb.	.52	—
Sucrose, refd., white, bgs., refy	lb.	.0970-	—
Sucrose acetate, isobutyrate, 90%, dms., t.l., dlvd	lb.	.33½-	—
dms., l.t.l., same basis	lb.	.35	—
tanks, same basis	lb.	.31	—
100%, t.l., dms., dlvd.	lb.	.35½-	—
l.t.l., dms., same basis	lb.	.37	—
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l., works	lb.	1.00	—
Sugar (see Sucrose).			
Sugar cane, wax, dom., refd., slabs, 80-lb. ctns., works	lb.	.60	.65
80-lb. ctns., spot	lb.	.65	.75
Sulfabenzamide, dms.	kilo.	8.80	9.90
Sulfabenzamide-sodium, dms.	kilo.	9.00	10.10
Sulfacetamide, USP, fib. dms	kilo.	6.61	6.83
Sulfacetamide-sodium, USP, fib. dms	kilo.	8.15	9.25
Sulfadiazine, USP, microcrystals, dms	kilo.	23.35	-24.45
USP, powd., dms.	kilo.	22.60	-23.70
Sulfadiazine-sodium, USP, dms	kilo.	24.80	-25.90
Sulfaguanidine, NF X, dms	kilo.	5.50	6.60
Sulfamerazine-sodium, USP, powd., dms	kilo.	24.80	25.90
Sulfamethazine, USP XV, microcrystals, dms	kilo.	19.65	-20.75
USP XV, powd., dms.	kilo.	18.75	-19.85
Sulfamic acid, cryst., dms., c.l., t.l., works	100 lbs.	16.00	—
dms., l.c.l., l.t.l., works	100 lbs.	17.50	18.50
Gran., dms., c.l., t.l., works	100 lbs.	14.75	—
dms., l.c.l., l.t.l., works	100 lbs.	16.25	-17.25
Sulfanilamide, NF, reg., 1,000 lb., frt. equald	lb.	1.50	—
NF, fib dm., frt. equald	lb.	1.55	—
Sulfanilamide quinoxaline, veterinary, dms	kilo.	16.28	—
Sulfanilic acid, tech., dms., c.l., frt. alld	lb.	.21	—
dms., l.c.l., frt. alld	lb.	.23	—
Sulfapyridine, USP XV, powd., bots., tins	kilo.	15.45	-16.55
Sulfapyridine-sodium, monohydrate, dms	kilo.	16.55	-17.65
Sulfathiazole, NF X, microcrystals, dms.	kilo.	6.25	6.90
NF X, powd., dms.	kilo.	5.50	6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more	lb.	2.35	—
Sulfur, coml., flour, bgs., mines.	100 lbs.	2.35	—
bbls., mines	100 lbs.	3.30	—
lump, bgs., mines	100 lbs.	2.25	—
bbls., mines	100 lbs.	2.80	—
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines	long-ton.	23.50	—
export, f.o.b. vessels, Gulf ports	long-ton.	25.00	—
US and Canada, f.o.b. vessels Gulf ports	long-ton.	25.00	—

Domestic dark sulfur prices are $1 per long-ton lower.

Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos	long-ton.	24.00	—

Mexican dark sulfur price is $1 per long-ton lower.

Sulfur, refd., flowers, NF, bgs., mines	100 lbs.	5.63	—
bbls., mines	100 lbs.	7.00	—
flour, light, bgs., mines	100 lbs.	5.25	—
bbls., mines	100 lbs.	6.25	—
lump, bgs., mines	100 lbs.	4.95	—
rolls, bgs., mines	100 lbs.	5.50	—
bbls., mines	100 lbs.	6.25	—
salt block, bgs., mines	100 lbs.	4.65	—
virgin block, bbls., mines	100 lbs.	4.70	—
Sulfur, rubbermakers, coml., reg., bgs., mines	100 lbs.	2.45	—
bbls., mines	100 lbs.	3.70	—
98-100%, passing through 325 mesh, bgs., mines	100 lbs.	2.55	—
bbls., mines	100 lbs.	3.80	—
refd., bgs., mines	100 lbs.	4.90	—
bbls., mines	100 lbs.	6.05	—
treated, 2.5% mineral oil, bgs., mines	100 lbs.	2.75	—
bbls., mines	100 lbs.	4.00	—
Sulfur dichloride, ret. dms., c.l., works, frt. equald	lb.	.05¼-	—
ret. dms., l.c.l., same basis	lb.	.06¼-	—
tanks, same basis	lb.	.04½-	—
Sulfur dioxide, liq., coml., cyls., works, frt. equald	lb.	.10	.12
multi-unit cars, works	lb.	.0535-	—
tanks, works	lb.	.045	—
Sulfur dioxide, refrigeration, cyls., dlvd	lb.	.23	—
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald	lb.	.05¼-	—
dms., l.c.l., same basis	lb.	.06¼-	—
tanks, same basis	lb.	.04½-	—
Sulfuric acid, 60° Be, cbys., c.l., works	100 lbs.	2.00	—
cbys., l.c.l., works	100 lbs.	2.30	—
tanks, works	ton.	18.60	—
66° Be, cbys., c.l., works	100 lbs.	2.25	—
cbys., l.c.l., works	100 lbs.	2.55	3.35
tanks, works	ton.	22.35	—
98%, tanks, works	ton.	23.50	—
99%, tanks, works	ton.	23.70	—
100%, tanks, works	ton.	23.95	—
CP, NF, consumers' cbys., c.l., frt. equald	lb.	.12¾-	—
Sulfuric acid, CP, NF, consumers', cbys., l.c.l., same basis.	lb.	.14¼-	.14¾
5-pt. bots., extra, cs., c.l., works, frt. alld	lb.	.16¼-	—
5-pt. bots., extra, cs., l.c.l., same basis	lb.	.17¾-	.18¼
Sulfuric acid, fuming (oleum), 20%, tanks, works	ton.	25.00	—
40%, tanks, works	ton.	29.00	—
65%, tanks works	ton.	39.50	—
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore	unit-ton.	.90	.93
bulk, c.l., Carteret, N. J.	unit-ton.	.90	.93
bulk, f.o.b. vessel at Fla.	unit-ton.	1.03	—
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla., unit-ton.		1.00	—
Sweet birch oil, USP, northern, cns.	lb.	4.00	9.50
USP, southern, cns.	lb.	2.00	3.05

T

2,4,5-T, dms., c.l., works, frt. equald.	lb.	1.18	—
dms., l.c.l., same basis	lb.	1.25	—
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald	lb.	1.24	—
dms., l.c.l., works	lb.	1.29	—
Talc, dom., fibrous, grd., bgs., c.l., works, New York	ton.	28.00	—
bgs., l.c.l., works	ton.	31.00	36.00
fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York	ton.	31.00	—
bgs., l.c.l., works	ton.	34.00	—
Talc, dom., fibrous, 99.95%, 400 mesh, micronized, bgs., c.l works	ton.	38.00	—
625 mesh, micronized, bgs., c.l., works	ton.	80.00	—
grd., Calif., grd., bgs., c.l., works	ton.	34.00	39.50
Vermont, off-color, grd., bgs., c.l., works	ton.	19.40	—
bgs., l.c.l., works	ton.	37.00	—
Imp., Canadian, grd., bgs., c.l., mines	ton.	20.00	35.00
Tall oil, crude, dms., c.l., works	lb.	.04¼-	.04½
tanks, works	lb.	.02¾-	.03
Dist., depending on grade, dms., c.l., works	lb.	.06½-	.07¼
dms., l.c.l., works	lb.	.07	.08
tanks, works	lb.	.04½-	.05¼
Tall oil, refd., depending upon grade, dms., c.l., works	lb.	.07¼-	.09
dms., l.c.l., works	lb.	.07½-	.09¼
tanks, works	lb.	.05¼-	.06¾
Tall oil acids, dms., c.l., works	lb.	.07	.08
dms., l.c.l.	lb.	.07¼-	.08¼
tanks, works	lb.	.05	.06
Tallow, edible, tanks, dlvd	lb.	.09¾-	.09⅞
Inedible, fancy, bleachable, tanks.	lb.	.06	—
fancy, guaranteed, bulk, f.o.b. steamer	lb.	.06½-	—
dms., f.a.s.	lb.	.07½-	—
tanks, dlvd.	lb.	.06¼-	—
No. 1, tanks, dlvd	lb.	.05	.05⅛
Prime, tanks, dlvd	lb.	.05¾-	—
Special tanks, dlvd	lb.	.05½-	—
Sulfonated, 25%, bbls., l.c.l.	lb.	.08½-	.08¾
50%, bbls., l.c.l.	lb.	.10½-	.11
Tallow acids, dist., dms.	lb.	.13¼-	.15¾
tanks	lb.	.10¾-	—
Hydrogenated, dms.	lb.	.14¾-	.17¼
Tallow oil, acidless, dms., c.l.	lb.	.13½-	—
dms., l.c.l.	lb.	.14½-	.15⅛
Tangerine oil, Florida, dms.	lb.	4.75	—
Tankage, animal, feeding, 9-11% ammonia, New York bulk.	unit-ton.	4.75	5.00
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots	lb.	2.05	—
bbls., smaller lots	lb.	2.06	2.07
NF, powd., bbls., 1,000-lb. lots	lb.	1.95	—
bbls., smaller lots	lb.	1.96	1.99
Tech., dms.	lb.	1.05	—
Tansy oil, dms.	lb.	6.60	8.00
Tar acid oil, 15-18%, dms., c.l., frt. equaid	gal.	.53½-	—
dms., l.c.l., same basis	gal.	.55½-	—
tanks, same basis	gal.	.43½-	—
Tar acid oil, 25-28%, dms., c.l., same basis	gal.	.60	—
dms., l.c.l., same basis	gal.	.62	—
tanks, same basis	gal.	.50	—
50-53%, dms., c.l., same basis	gal.	.75	—
dms., l.c.l., same basis	gal.	.77	—
tanks, same basis	gal.	.65	—
Tar, coal (see Coaltar).			
Tartar emetic (see Antimony potassium tartrate).			
Tartaric acid, NF, 100-lb. bgs., c.l., frt. equald	lb.	.41	—
bgs., 10,000 lbs., 1 shipt., same basis	lb.	.43	—
bgs., smaller lots, same basis	lb.	.47	—
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms	lb.	.70	—
Terpineol, extra, dms.	lb.	.50	.60
Prime, dms.	lb.	.40	.50
Terpinyl acetate, extra, cns., dms.	lb.	.64	.75
Prime, dms.	lb.	.53	.56
Terpinyl propionate, dms.	lb.	1.70	—
Terra alba (see Gypsum).			
Testosterone, USP, bots.	gram.	No prices.	
Testosterone propionate, USP, bots.	gram.	No prices.	
Tetrachloroethane, dms., works	lb.	.14½-	—
Tetrasodium pyrophosphate (see Sodium pyrophosphate).			
Tetrachloroethylene, tech. (see Perchloroethylene).			
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works	lb.	.20¼-	—
dms., l.c.l., works	lb.	.22	.23¼
Tetraethyl orthosilicate, dms., c.l., dlvd. E	lb.	.60	—
dms., l.c.l., dlvd. E	lb.	.61½-	—
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald	lb.	.75	—
Tetraethylenepentamine, dms., c.l., dlvd. E	lb.	.53½-	—
dms., l.c.l., dlvd. E	lb.	.55	—
tanks, dlvd. E	lb.	.51	—
Tetraethylthiuram disulfide, tech., dms., frt. alld	lb.	1.04	—
Tetrahydrofuran, dms., c.l., t.l., works	lb.	.36½-	—
dms., l.c.l., or l.t.l., works	lb.	.37	—
tanks, works	lb.	.35	—
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn.	lb.	.31½-	—
dms., l.c.l., Memphis, Tenn.	lb.	.32½-	—
dms., c.l., t.l., Newark, N.J.	lb.	.33½-	—
dms., l.c.l., Newark, N.J.	lb.	.34½-	—
tanks, dlvd. E. of Denver	lb.	.31	—
tanks, dlvd. W. of Denver	lb.	.32	—

My name's Nosey. I'm the Esso Solvents Expert. And I'm illustrating the fact that Varsol's odor is *down* and its quality *up*.

As you know, odor is hard to control without sacrificing solvent power. That's why Esso has been researching low odor for years. Fact is, we have an Odor Panel composed of experts in all of our refinery and research establishments. These people are dedicated to the continuing improvement of "low odor" Esso Solvents.

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Tetrahydrophthalic anhydride, dms., c.l., t.l., frt. alld. E	lb.	.39	—
l.c.l., l.t.l., same basis	lb.	.41	—
Tetrapotassium phosphate (see potassium phosphate).			
Thallium metal, dlvd	lb.	7.50	-10.00
Thallium sulfate, 99%, bots., dlvd.	lb.	5.00	-10.00
Theobromine, NF, fib. dms., 100-lbs., f.o.b., works	lb.	4.40	- 4.75
Theobromine and sodium acetate, USP, fib. dms., 500-lbs. works	lb.	6.45	—
Theobromine, sodio-salicylate, NF, fib. dms., 500-lbs., works.	lb.	3.80	—
Theophyline, USP, anhyd., 100-lb. dms., frt. alld	lb.	3.65	—
Thiamine hydrochloride, USP, fib. dms., frt. alld	kilo.	36.00	—
USP, ampule grade, fib., dms., frt. alld	kilo.	38.00	—
Thiamine mononitrate, USP, fib. dms., frt. alld	kilo.	36.00	—
Thiocarbanilide, dms., ton lots	lb.	.72	—
dms., less ton lots	lb.	.74	—
Thiodiphenylamine (see Phenothiazine).			
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works	lb.	5.20	—
Tungstated, PTMA, kgs., works	lb.	6.20	—
Thioglycolic acid, refd., 55 gal. dms., ton lots, 100% basis	lb.	1.15	—
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works	lb.	4.00	—
Thiourea, tech., bgs., t.l., frt. alld.	lb.	.30	—
bgs., ton lots, same basis	lb.	.32	—
bgs., less than ton lots, same basis	lb.	.33	—
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works	lb.	3.50	—
dl-Threonine, bots., 1-kilo lots	kilo.	275.00	—
Thyme leaves, French, bgs	lb.	.25	—
Spanish, bgs.	lb.	.09	—
Thyme leaves, bgs.	lb.	.29	—
Spanish, bgs.	lb.	.11	—
Thyme oil, NF, red, cns., dms	lb.	1.90	- 2.25
NF, white, cns.	lb.	2.20	- 2.60
Tech., white, cns.	lb.	.40	- 1.85
Thymol, fib. dms., 25-lbs., f.o.b. works	lb.	3.06	—
Thymol iodide, NF, dms., 100-lbs. f.o.b. works	lb.	7.40	—
Timbo root (see Cube root).			
Tin chloride (see Stannous chloride, anhyd.).			
Tin crystals (see Stannous chloride, hydrous)			
Tin metal (Straits)	lb.	1.04	—
Tin oxide (see Stannic oxide).			
Tin sulfate (see Stannous sulfate).			
Tin tetrachloride, anhyd. (see Stannic chloride, anhyd.).			
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd.	lb.	.25½	—
bgs., l.c.l., dlvd.	lb.	.26½	—
reg., bgs., c.l., dlvd.	lb.	.25½	—
bgs., l.c.l., dlvd.	lb.	.26½	—
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville, Fla.	ton.	180.00	—
bgs., 5-ton lots, Niagara Falls, N. Y.	ton.	205.00	—
bgs., ton lots, same basis.	ton.	215.00	—
Milled metallurgical titanium dioxide $7.50 per ton higher.			
Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd. E	lb.	.27½	—
bgs., l.c.l., dlvd. E	lb.	.28½	—
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd	lb.	.09⅜	—
bgs., l.c.l., works	lb.	.09⅞	—
50% Ti O_2, high-tinting, dms., c.l.,	lb.	.14¾	—
dms., l.c.l.	lb.	.14⅞	—
Titanium hydride, powd., dms., works	lb.	8.10	- 9.00
Titanium tetrachloride, tech., dms., c.l., works	lb.	.26	—
dms., l.c.l., works	lb.	.27½	.29
tanks, works	lb.	.20	—
Tobias acid, dms., c.l., t.l.	lb.	.78	—
dms., l.c.l.	lb.	.81	—
d-a-Tocopherols, NF, mixer, conc., pure basis, bots	kilo.	67.00	—
d-a-Tocopheryl acetate, NF, conc., pure basis, bots	kilo.	122.00	—
d-a-Tocopheryl acid succinate, cryst., bots	kilo.	109.00	—
dl-a-Tocopherol, bots.	kilo.	99.00	—
dl-a-Tocopheryl acetate, bots.	kilo.	90.00	—
25% dry, powd., bots	kilo.	22.50	-24.00
33% dry, powd., bots.	kilo.	30.00	-31.50
o-Tolidine base, dry, kgs., 100% basis	lb.	1.53	—
Paste, kgs., 100% basis	lb.	1.50	—

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine, hydrochloride paste, kgs., 100% basis	lb.	1.50	—
Tolu balsam, cns.	lb.	3.50	- 3.65
Toluene, coaltar, indust., or nitration, tanks, dlvd. E. of Rockies	gal.	.25	—
Toluene, petroleum, indust., tanks, dlvd. E. of Rockies	gal.	.23	—
p-Toluenesulfonamide, powd., dms., t.l., works	lb.	.60	—
dms., l.t.l., same basis	lb.	.63	—
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld.	lb.	.16	—
1,000-lb. or more, same basis	lb.	.18	—
less than 1,000-lb., same basis	lb.	.23	—
tanks, same basis	lb.	.14	—
Toluenesulfonic acid in 10-gal. dms., 2c. per lb. more.			
p-Toluenesulfonic acid monohydrate, dms., c.l., or t.l.	lb.	.90	—
dms., 125 lbs. to t.l.	lb.	1.00	—
m-Toluidine, dms., c.l., works, frt. alld.	lb.	.83	—
dms., l.c.l., same basis	lb.	.84	—
tanks, same basis	lb.	.82	—
o-Toluidine, dms., c.l., works, frt. alld.	lb.	.30	—
dms., l.c.l., same basis	lb.	.31	—
tanks, same basis	lb.	.28	—
p-Toluidine, tech., flake, dms., frt. alld.	lb.	.50	—
Cast, dms., frt. alld.	lb.	.45	—
p-Toluidine-m-sulfonic acid, dms., works	lb.	.92	- 1.04
Toluidine red toner, deep shades, kgs., works	lb.	1.70	—
Light shades, kgs., works	lb.	1.70	—
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld.	lb.	1.10	—
Tonka beans, Angostura, cks.	lb.	1.50	—
Brazilian, Surinam, cs.	lb.	1.30	—
Totaquine, 100-oz. lots, cns.	oz.	.42	—
Toxaphene, dms., c.l., t.l., works.	lb.	.22	—
dms., l.c.l., l.t.l., works	lb.	.28	—
Tragacanth gum, No. 1, ribbons, cs.	lb.	3.90	- 3.95
No. 2, cs.	lb.	3.60	- 3.75
No. 3, cs.	lb.	3.25	- 3.40
USP, powd., bbls.	lb.	1.05	- 1.15
Triacetin dms., c.l., dlvd. E. of Rockies	lb.	.39	—
dms., l.c.l., same basis	lb.	.40	—
tanks, same basis	lb.	.37	—
Triallylamine, dms., c.l., dlvd	lb.	.965	—
dms., l.c.l., dlvd.	lb.	.995	—
tanks, dlvd.	lb.	.96	—
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver	lb.	.42¼	—
non-ret. dms., l.c.l., frt. alld. E. of Denver	lb.	.43½	—
tanks, frt. alld. E. of Denver	lb.	.40	—
Tributyl phosphate, dms., c.l., works.	lb.	.52½	—
dms, l.c.l., same basis	lb.	.53½	—
tanks, same basis	lb.	.50	—
Tributylamine dms., c.l., works	lb.	.67½	—
dms., l.c.l., same basis	lb.	.69	—
tanks, same basis	lb.	.65	—
Tributyrin, dms., l.c.l., dlvd.	lb.	.69	—
Trichloroacetic acid, bots	lb.	2.00	- 2.50
Trichlorobenzene, dms., c.l., frt. alld. E	lb.	.15	—
dms., l.c.l., frt. alld. E.	lb.	.16	—
tanks, frt. alld. E.	lb.	.13¼	—
Trichlorobenzene prices in the West 1¾c. higher.			
1,1,1-Trichloroethane, dms., c.l., dlvd.	lb.	.13¼	—
dms, l.c.l., dlvd.	lb.	.16¼	—
tanks, dlvd.	lb.	.12¼	—
1,1,2-Trichloroethane, dms., c.l., works	lb.	.13½	—
dms., l.c.l., dlvd. E	lb.	.14¼	—
tanks, works	lb.	.11½	—
Trichloroethylene, dms., c.l., or t.l., dlvd	lb.	.14	—
dms., l.c.l., dlvd.	lb.	.15¼	—
tanks, dlvd.	lb.	.12¾	—
Trichloroisocyanuric acid, dms., c.l., t.l., frt. equald	lb.	.65	—
dms., l.c.l., same basis	lb.	.75	—
Trichlorophenoxyacetic acid (see 2,4,5-T).			
Tricholine citrate, 65% soln., ret. cbys., works, frt. adjusted.	lb.	1.40	- 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd	lb.	.35	—
dms., l.c.l., dlvd.	lb.	.36	—
tanks, dlvd.	lb.	.32½	—
Tricresyl phosphate, petroleum, dms., c.l., dlvd	lb.	.34½	—
dms., l.c.l., dlvd	lb.	.35½	—
tanks, dlvd.	lb.	.32½	—
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E	lb.	.26½	—
dms., l.c.l., dlvd. E	lb.	.28	—
tanks, dlvd. E	lb.	.24	—
Triethanolamine, dms., c.l., dlvd. E.	lb.	.24½	—
dms., l.c.l., same basis	lb.	.26	—
tanks, same basis	lb.	.22	—
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld.	lb.	.25½	—
dms., l.t.l., frt. alld.	lb.	.26½	—
tanks, frt. alld.	lb.	.24½	—
Triethylamine, dms., c.l., dlvd. E.	lb.	.50	—
dms., l.c.l., same basis	lb.	.51½	—
tanks, same basis	lb.	.47½	—
Triethyl nitrate, refd., tech., non-ret. dms., c.l., frt. alld. E. of Denver	lb.	.46¼	—
non-ret. dms., l.c.l., frt. alld. E. of Denver	lb.	.47¼	—
tanks, frt. alld. E. of Denver.	lb.	.43¾	—
Triethyl phosphate, dms., c.l., dlvd.	lb.	.40½	—
dms., l.c.l., dlvd.	lb.	.41½	—
tanks, dlvd.	lb.	.38	—
Triethylene glycol, dms., c.l., dlvd. E	lb.	.21	—
dms., l.c.l., dlvd. E	lb.	.22½	—
tanks, same basis	lb.	.18½	—
Triethylenetetramine, dms., c.l., dlvd. E	lb.	.51½	—
dms., l.c.l., dlvd. E	lb.	.53	—
tanks, dlvd. E	lb.	.49	—
Triisobutylene, tanks, dlvd.	lb.	.08	—
Tri-isopropanolamine, dms., c.l., dlvd. E	lb.	.23¼	—
dms., l.c.l., dlvd. E	lb.	.24¾	—
tanks, dlvd. E	lb.	.20¾	—
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis	lb.	.30	.305
tanks, frt. equald, 100% basis.	lb.	.26	—
25-40% soln., dms., c.l., frt. equald, 100% basis	lb.	.35	—
dms., l.c.l., frt. equald, 100% basis	lb.	.35½	—
tanks, 100% basis, frt. equald	lb.	.28	—
Trimethylolpropane, dms., c.l., t.l., dlvd. E	lb.	.35	—
dms., l.c.l., l.t.l., same basis	lb.	.36	—
Trioxanes, pure, dms., c.l., t.l., works	lb.	.50	—
dms., l.c.l., works	lb.	.51½	—
Tripentaerythritol, bgs., c.l., t.l., dlvd. E	lb.	.40	—
bgs., l.c.l., l.t.l., dlvd. E	lb.	.41	—
Triphenyl phosphate, bbls., c.l., frt. equald	lb.	.41½	—
bbls., l.c.l., frt. equald	lb.	.43½	—
Triphenylguanidine, bbls., works	lb.	.90	—
Tripropylene, dms., c.l., dlvd. E	gal.	.44	—
dms., l.c.l., same basis	gal.	.54	—
tanks, same basis	gal.	.28	—
Tripropylene glycol, dms., c.l., t.l., frt. alld. E	lb.	.20½	—
dms., l.c.l., l.t.l., frt. alld. E	lb.	.22	—
tankcars and compartmented tankcars, frt. alld. E	lb.	.17½	—

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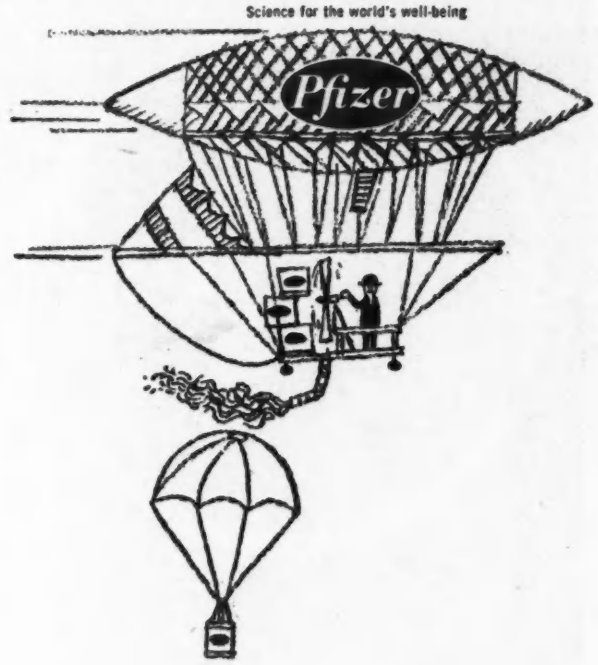

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Tripropylene glycol, tankwagon and compartmented tankwagons, 1,000 gals. min. frt. alld. E lb. .18 • —
Tripropylene glycol prices 1c. per lb. higher in west.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, fib., dms., works lb.55.00 • —
Tung oil, dms., New York lb. .24½- .25
tanks, imported, N. Y. lb. .23 • .23⅛
tanks, domestic, mills lb. .22⅝- —
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 4.25 • —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 • —
dms., smaller lots, works lb. 2.45 • —
Turkey red, bbls., works lb. .62 • —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 • .50
Tuscan red, bbls., frt. equald lb. .26 • .32
Tyrothricin, USP, 1 to 5 kilos gram. .54 • —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E of Rockies lb. .35 • .39½
Jobbing types, bbls., same basis lb. .19 • —
Regular types, dry bbls., same basis lb. .22½- .35
Ultramarine blue prices 1c. higher W. of Rockies.

Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l., works lb. .07¾- .08
Umber pigment, burnt, turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .08¼- —
Raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid, dms. lb. 1.28 • —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E. ton.125.00 • —
bgs., l.c.l., dlvd. E. ex whse. ton.145.00 • —
45% N, agricultural, bgs., c.l., (30 tons) dlvd. E. ton.103.00 • —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald ton.120.00 • —
37 grade, tanks, same basis ton.145.00 • —
Urethane, USP, dms., t.l., f.o.b., works lb. .65 • —
dms., l.t.l., same basis lb. .70 • —
Uva-ursi leaves, bls lb. .12 • —

V

Valerian root, Belgian bgs. lb. .32 • —
Indian, bgs. lb. .25 • —
dl-Valine, dms., works lb.21.00 -27.50
Vanadium pentoxide, tech., dms., works lb. 1.38 • —
Vandyke brown, bbls., works lb. .09½- .12
Vanilla beans, Bourbon, tins lb.11.25 • —
Mexican cuts, tins lb.11.50 • —
whole, tins lb.12.00 • —
Vanillin ex lignin, 100-lb. fib. dms., 1,000-lb. lots or more lb. 3.00 • —
100-lb. fib. dms., 500-lb. lots lb. 3.10 • —
100-lb. fib. dms., cns. 100-lb. lots lb. 3.25 • 3.35
Venetian red, jobbing, bgs., works. lb. .0475- —
Venetian red, 20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30%, bgs., works lb. .06 • —
35%, bgs., works lb. .0625- —
40%, bgs., works lb. .0675- —
Vetiver oil, Bourbon, cns. lb.17.25 -17.50
Haitian, cns. lb.14.50 -15.50
Victoria blue toner, molybdated, PMA 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 • 4.95
Tungstated, PTMA, 250-lb. bbls., dlvd. E. of Rockies lb. 5.55 • —
Victoria blue toner, bbls., prices 1c. higher W. of Rockies.
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd. lb. .20 • —
55-gal. dms., l.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .17½- —
tanktrucks less than 4,000 gal., dlvd lb. .18 • —
Zone 2, 55-gal. dms., c.l., dlvd lb. .21 • —
55-gal. dms., l.c.l., dlvd. lb. .24 • —
tanks, dlvd. lb. .18½- —
Vinyl acetate monomer, zone 2, tanktrucks, less than 4,000 gals. dlvd lb. .19 • —
Zone 1 is all continental US except zone 2, zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 • —
Vinyl chloride monomer, tanks, works lb. .125 • —
Vinyl ether USP, anethesia, bots., 50cc., hospitals bot. 1.12 • —
bots., 75cc., hospitals bot. 1.56 • —
Vinyl ethyl ether tech. dms., c.l., works lb. .29¼- —
dms., l.c.l., works lb. .30 • —
tanks, works lb. .27¼- —
Vinyl propionate monomer, dms., c.l., dlvd lb. .49 • —
dms., l.c.l., same basis lb. .50 • —
tanks, same basis lb. .47 • —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 • —
1 to 9 dms., works lb. 1.35 • —
tanks, works lb. 1.15 • —
Vinyltoluene, dms., c.l., f.o.b., works. lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
tanks, f.o.b. dest. frt. prepaid lb. .14 • —
Viosterol in nat. vegetable oil, 1,000,000 D units per gram. bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Virginia type red, bbls., works lb. 1.40 • —
Vitiamin A acetate, syn., cryst., beads, 500,000 A units per gram gram .07¼- —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.65.00 • —
325,000 units per gram, same basis kilo.43.88 • —
250,000 units per gram, same basis kilo.33.75 • —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher.
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units. .09½- —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .09½- —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tins gram.95.00 • —
0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo dms gram. 1.14 • —
0.1% vitamin B_{12}, USP adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. 1.14 • —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B_{12} activity gram.85.00 • —
0.1% trituration of cryst., B_{12} with dicalcium phosphate or mannitol, 1-10 kilo.109.00 • —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin, 500-gram bots., 1-5 kilo, dms., frt. alld gram. .90 • —
0.1% cobalamin concentrate in gelatin, 1-10 kilo. dms., frt. alld gram. .90 • —
Vitamin C (see Ascorbic acid).
Vitamin D_2 (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram, kilo lots kilo.42.50 • —
850,000 units per gram less than kilo lots kilo.45.00 • —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls. lb. 2.00 • 2.25
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 • —
dms., 25-49-lb. lots, New York or Chicago lb. 2.05 • —
dms., 5-24-lb. lots, New York or Chicago lb. 2.15 • —
Watchung-type reds., bbls lb. 1.95 • —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. gal.12.25 • —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb. .21 • .22
White precipitate, USP, powd., dms., 100 lbs., f.o.b. works lb. 5.50 • —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls lb. .22 • —
Thin, rossed, bls. lb. .22 Nom.
Wintergreen oil, USP nat. northern, cns lb. 6.35 -17.50
USP, nat. southern cns lb. 3.75 • 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls lb. .16 • .17
Witch hazel leaves, bls. lb. .25 • —
Wollastonite fine bgs., c.l., works. ton.39.50 • —
bgs., l.c.l. ex whse ton.56.00 • —
Medium, bgs., c.l., works ton.27.00 • —
bgs., l.c.l., ex whse. ton.44.00 • —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed Levant bgs. lb. 2.50 • —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns lb. 4.75 • 5.00

X

Xylene coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .29 • —
Birmingham dist. gal. .29 • —
Chicago dist. gal. .28½- —
Cleveland dist. gal. .29 • —
Geneva, Utah gal. .29 • —
Johnstown, Pa. gal. .29 • —
Lackawanna, N. Y gal. .29½- —
Xylene, coaltar, indust., tanks, works:
Lone Star, Tex. gal. .27 • —
Lorain, Ohio gal. .29 • —
Middletown, Ohio gal. .30 • —
Minnequa, Col. gal. .29 • —
Philadelphia dist. gal. .29 • —
Pittsburgh dist. gal. .29 • —
Sparrows Point, Md. gal. .29 • —
Terre Haute, Ind. gal .29 • —
Youngstown, Ohio gal. .29 • —
Xylene, petroleum, indust., tanks f.o.b. works:
Bayonne, N. J gal. .29 • —
Baytown, Tex. gal. .27 • —
Charleston, S. C. gal. .29 • —
Chicago, Ill gal. .28½- —
Detroit, Mich., dlvd gal. .27½- .29
Houston, Tex. gal. .27 • —
Philadelphia, Pa. gal. .29 • —
Providence, R. I. gal. .30 • —
Sewell's Point, Va. gal. .28 • —
Wood River, Ill. gal. .28½- —
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif lb. .25 • —
dms., l.c.l., f.o.b., Richmond, Calif lb. .26 • —
tanks, frt. alld. lb. .23 • —
o-Xylene, dms., c.l., works lb. .08 • —
dms., l.c.l., works lb. .09 • —
tanks, works lb. .06 • .06¼
p-Xylene, dms., c.l., works lb. .20 • —
dms., l.c.l., works lb. .21 • —
tanks, frt. alld. lb. .1645- —

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VANCORAM AMMONIUM METAVANADATE – (NH_4VO_3)

Grade	*Analysis*
Technical, Powder	NH_4VO_3—99% min.
C. P.	NH_4VO_3—99.8% approx.

VANCORAM VANADIUM PENTOXIDE – (V_2O_5)

Grade	*Analysis*
Technical—Air-Dried	V_2O_5—83 to 86%
Technical—Fused Flake	V_2O_5—88 to 92%
Purified	V_2O_5—99.6% approx.
C. P.	V_2O_5—99.9% approx.

VANCORAM SODIUM METAVANADATE – ($NaVO_3 \cdot xH_2O$)

Grade	*Typical Analysis*
Technical, Powder	V_2O_5—61.40% Na_2O—20.90%

VANCORAM VANADIUM CHLORIDE – ($V_2O_2Cl_4$ – Concentrated Aqueous Solution) (Di Vanadyl Tetrachloride)

Grade	*Analysis*
C. P., Syrupy	$V_2O_2Cl_4$—aqueous solution 82.00% approx. concentration

VANCORAM VANADYL SULFATE – ($VOSO_4 \cdot 3½ H_2O$)

Grade	*Typical Analysis*
C. P., Crystals	$VOSO_4 \cdot 3½H_2O$—22.1%V

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Xylenol, cryst., 45°-47°C., m.p., dms., l.c.l., works	lb.	.23	- —
56°-58°C., m.p., dms., l.c.l., works, frt. equald	lb.	.33	- —
Xylenol, cryst., 60°-62°C., m.p., dms., l.c.l., same basis.	lb.	.40	- —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis	gal.	1.25	- —
dms., l.c.l., same basis	gal.	1.30	- —
tanks, same basis	gal.	1.05	- —
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis.	gal.	1.35	- —
Xylenol fraction, b.r. 7°-9° C., dry at or below 227° C., dms., l.c.l., same basis	gal.	1.40	- —
2,4-Xylidine, tech., dms., frt. alld.	lb.	1.15	- —
2,5-Xyliline, tech., dms., frt. alld.	lb.	1.20	- —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works	lb.	.39	- —
dms., l.c.l., same basis	lb.	.40	- —
tanks, same basis	lb.	.33	- —

XYLOL

Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, crs.	lb.	2.15	- 3.05
Yeast, brewers, debittered, USP XV, Sacchomyces, dlvd	lb.	.27	- —
primary, USP XV, 150 mcg. B_1 per gram, 100-lb. dms	lb.	.47	- —
USP XV, 270 mcg., B_1 per gram, 100-lb. dms	lb.	.52	- —
USP XV, 300 mcg., B_1 per gram, 100-lb. dms	lb.	.56	- —
USP XV, 900 mcg., B_1 per gram, 100-lb. dms.	lb.	.60	- —
Torula, USP, dlvd.	lb.	.18	- —

YELLOW PIGMENTS

Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls.	lb.	.40	- .45
Ylang-ylang oil, Bourbon, bots.	lb.	7.00	-22.00
extra, bots.	lb.	24.00	-33.00
extra, bots.	lb.	24.00	-33.00
Yohimbine hydrochloride, bots., tins.	oz.	3.75	- 4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb. lots or more, dlvd	lb.	.343	- —
bgs., smaller lots, dlvd	lb.	.373	- —
Zinc acetate, NF, VIII, dms	lb.	.53	- —
Tech., dms., l.t.l., works	lb.	.29¾	- —
Zinc borate, bgs., 1,000 lbs or more, works	lb.	.25	- —
bgs., less than 1,000 lbs., same basis	lb.	.27	- —
Zinc chloride, NF, gran., dms	lb.	.42	- —
NF, precip., powd., dms	lb.	.26	- —
Tech., soln., 50%, dms., c.l., works	100 lbs.	5.80	- —
dms., l.c.l., works	100 lbs.	6.40	- —
tanks, works	100 lbs.	5.15	- —
fused, dms., c.l., works	100 lbs.	10.70	- —
dms., l.c.l., works	100 lbs.	11.20	- —
gran., fib. dms., c.l., works.	100 lbs.	11.45	- —
fib. dms., l.c.l., works	100 lbs.	11.95	- —
Zinc chromate bbls., dlvd.	lb.	.29	- —
Basic bbls., dlvd.	lb.	.34	- —
Zinc cyanide dms. 1,000-lb. lots or more, works	lb.	.55	- —
dms., smaller lots, works	lb.	.57	- —
Zinc dust coml. bbls., c.l., works.	lb.	.17	- —
Pigment, bbls., c.l., works	lb.	.16½	- —
bbls., l.c.l., works	lb.	.18¼	- —
Zinc fluoride, bbls., works	lb.	.49	- .50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½	- —
dms., l.c.l., frt. alld.	lb.	.23½	- —
Zinc metal prime western, slabs, E. St. Louis	lb	.13	- —
Prime western slabs, New York.	lb.	.13½	- —
Zinc naphthenate liq. 8% Zn., dms., frt. alld	lb.	.27	- —
10% Zn., dms., frt. alld.	lb.	.33	- —
Zinc nitrate tech. cryst., bbls., works	lb.	.20	- —
Zinc oxide, pigment, American process, lead-free bgs., c.l., frt. alld	lb	.14½	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15	- —
bgs., l.c.l., smaller lots, same basis	lb.	.15½	- —
leaded, 35% bgs, c.l., mills, frt. alld	lb.	.15⅝	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15⅞	- —
leaded 50% bgs., c.l., same basis	lb.	.15¾	- —
Zinc oxide pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼	- —
USP, gran., dms.	lb.	.26	- —
French process, green seal, bgs., c.l., mills, frt alld	lb.	.16¼	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	16¾	- —
bgs., l.c.l, smaller lots, same basis	lb.	.17¼	- —
red seal, bgs., c.l., same basis.	lb.	.15¾	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼	- —
bgs., l.c.l, smaller lots, same basis	lb.	16¾	- —
white seal, bgs., c.l., same basis	lb	.16¾	- —
bgs., l.c.l., 10 tons or more, same basis	lb	.17¼	- —
bgs., l.c.l., smaller lots, same basis	lb	.17¾	- —
Zinc oxide, USP dms., c.l., frt. alld.	lb.	.18¼	- —
dms., l.c.l., 10 tons or more, same basis	lb	.18¾	- —
dms., l.c.l., smaller lots, same basis	lb.	.19¼	- —
Zinc phenolsulfonate, NF, gran., dms	lb.	.45	- .46
NF, powd., dms.	lb.	.48	- .49
Zinc resinate, precip., 7.2-7.6% Zn., dms., frt. alld	lb.	.40¼	- —
Zinc silicofluoride, dms., works	lb.	.12½	- .14
Zinc stearate, tech., USP, ctns., c.l.	lb.	.41	- —
ctns., l.c.l.	lb.	.42	- .46
Zinc sulfate, powd., monohydrate, 36% Zn, bgs., c.l., dlvd.E.	100 lbs.	8.75	- —
bgs., l.c.l., dlvd. E.	100 lbs.	9.75	- —
Zinc sulfate in bbls 40c. higher.			
Zinc sulfide, pure, bgs., c.l., dlvd	lb.	.2530	- —
Zinc undecylenate, dms.	lb.	2.00	- —
Zinc, yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	- —
bbls., c.l., works	100 lbs.	10.85	- —
bbls., l.c.l., works	100 lbs.	11.35	- —
Zinc formaldehyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb.	.26	- —
Normal, 250-lb. dms., frt. alld	lb.	.52	- —
Zircon (G) gran., bgs., c.l., works.	lb.	.03¼	- —
bgs., 5 tons to c.l., works	lb.	.03⅜	- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04	- —
bgs., smaller lots, works	lb.	.06½	- —
Zircon (G), milled, bgs., c.l., works.	lb.	.04¼	- —
bgs., 5 tons to c.l., works	lb.	.04⅜	- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝	- —
bgs., 500-1,999-lb. lots, works	lb.	.07½	- —
Zircon (G) in barrels 1c. higher.			
Zirconium acetate soln., 13% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.23	- —
Zirconium hydride, powd., electronic grade, dms., works	lb.	14.00	-15.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works	lb.	1.50	- —
Electric-fused lump, bgs., 500 to 1,999-lb. lots, works	lb.	.48½	- —
bgs., smaller lots, works	lb.	.51	- —
milled, bgs., c.l., works	lb.	.62	- —
bgs., 5-ton lots, works	lb.	.62½	- —
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½	- —
bgs., 500 to 1,999-lb. lots, works	lb.	.64	- —
bgs., smaller lots, works	lb.	.66	- —
Zirconium Oxide, Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55	- .65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27	- .50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62	- .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½	- —
bgs., l.c.l., smaller lots, same basis	lb.	.16⅝	- —

Olin Is Doubling Its Capacity Of Swimming Pool Chemical

Olin Mathieson Chemical Corporation is doubling the output of a water sanitizing, dry chlorine chemical manufactured at Niagara Falls, N.Y. One of the chief reasons, says Olin, is the market created by the growing number of home swimming pools.

The chemical, sold under the trade name "HTH," contains 70 percent available chlorine. Sold in both granular and tablet form, it also has wide industrial uses.

The expansion, part of an announced multi-million dollar program, will be completed in two stages. The first stage will be completed by March, 1961, the second by the end of 1961. Both phases call for new equipment and increased capacity of present machinery.

Chemical Exports

—Continued from page 7

higher than the $7,420.9 million reported for the corresponding period last year. Second quarter imports were valued at $3,829.9 million, a level slightly below the $3,853.6 million reported for the same period of 1959.

During June alone, imports amounted to $1,313 million, an increase of about 4 percent over the May total of $1,259.5 million, but a decrease of about 4 percent from the June, 1959 total of $1,369.3 million.

Narcotics Restriction List Has Four Products Added

The addition of four more chemical compounds to the growing list of drug products subject to the restrictions of the narcotic laws has just been announced by the White House in Presidential Proclamation 3362.

Because they have addiction-sustaining liability similar to morphine, the following have been made subject to the control law:

- Benzethidine (ethyl 1-(2benzyloxyethyl)-4-phenyl-4-piperidine carboxylate).
- Furethidine (ethyl (1-(2-tetrahydrofurfuryloxyethyl)-4-phenyl-4-piperidine carboxylate).
- 2-(p-chlorobenzyl)-1-diethylaminoethyl-5-nitrobenzimidazole.
- 2-(p-ethoxybenzyl0-1-diethylaminoethyl-5-nitrobenzimidazole.

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Phytol

Carotene

Xanthophyll

Anti-Oxidant (BHT)

Hydropoid

Oil, Paint and Drug Reporter

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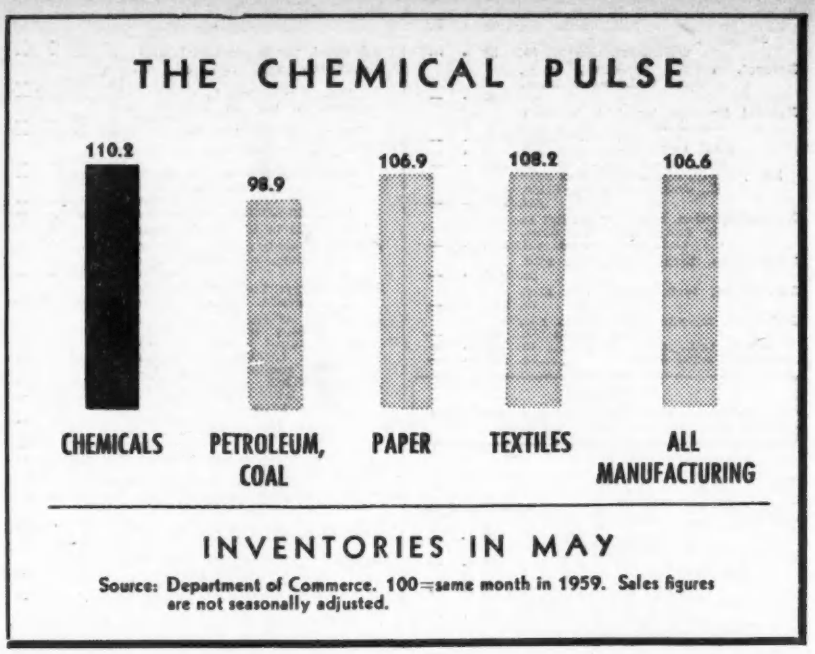


A Foreign Policy Must

The foreign policy of this country is going to have a big place in the agenda of this year's expectably extraordinary campaigning for its highest political award. It is to be expected that "policy" will be given a most comprehensive semantic application by all those who will proclaim their views on what it should be and how. There is a question as to what will be the relativity in volume and weight of theoretical and practical ideas dished out for public consumption; what distinctions will be discernible between words and deeds. To what extent will governmental policy include political, commercial, and social relations? Will the biggest need of the Western hemisphere be given even due recognition, to say nothing of promotion? That need is for the development of Pan-Americanism sufficient to meet the competition of communism defensively and offensively—a gigantic task, calling for the fullest possible collaboration of government, private enterprise, and social organizations, because the economic needs of the Americas are political, commercial, and social—and, under communism, all three economies are governmentally conducted and controlled.

It is not possible to make even a reasonable guess as to what may be contributed toward the desirable, necessary, yes, imperative development of Pan-Americanism from the meeting, this week, of the foreign ministers of the member nations of the Organization of American States, the objective of which was said to be "consideration of the needs of continental solidarity, the defense of the regional system, and the threat to democratic principles." Of course, efforts will be made to interject some of the numerous conflicts among the member nations, including that between the United States and Cuba; and that they will have some measure of success—with results that anybody can at least guess at. The US Department of State attaches more importance to the meeting of the economic ministers of the twenty-one OAS republics, which is scheduled for September 5. President Eisenhower's call upon congress for prompt authorization of his long-range program for Latin-American aid reflects the department's desire to have a specific proposal to present at that meeting, instead of talking only in general terms.

Those who have earnestly concerned themselves with the relations of this country—and its people—with its Latin-American fellow-hemispherеans look with greatest expectations and at least a fair measure of approval upon the potentialities of Operation Pan-America, the major interests of which are in (1) financing of economic development, (2) role of technical assistance in the achievement of growing industrial and agricultural productivity, (3) subsequent consideration of the problems of basic commodities. Operation Pan-America was informatively discussed in a letter, dated July 19, which President Kubitschek of Brazil sent to President Eisenhower. An unofficial translation of that communication was published in some newspapers in this country about two weeks later under the auspices of the American Brazilian Association. It should be read studiously by all who are in any way politically, industrially, commercially, or socially concerned with Pan-American relations.

Health Service Slants

The many who do not have to read about it in the public press to know how the costs of medical and hospital care have gone skyward over the past few decades will have difficulty in understanding why, according to the Association of American Medical Colleges, the number of applicants for admission into such institutions has been dropping steadily over the past three years, with an aggregate decline of 6 percent. The reason must be dislike for what is required of a practicing physician, although his work-week now has only about one-third as many hours as it had before his fees began to go up. But, that the latter is an attraction may be inferred from the records that the number of accepted students has increased 3 percent over the three-year period—of course, that is largely attributable to expansion of facilities.

Those who need health services will be "interested" also to learn from a report to the mayor of New York by his health service commission that the city hospitals have the services of only 28.5 percent of the number of staff nurses for which they have budget allowances. Their number of practical nurses is 81.7 percent of the budgeted total. But, the number of nurse's aids exceeds the budgeted quota by 60 percent, leading the investigators to conclude that "untrained people are given uniforms and employed in positions originally approved for professionally trained and licensed personnel: the implications for patient care are alarming."

Still more alarming is the commission's finding: "Rarely do medical students trained in approved medical schools apply for internship positions in these hospitals. In fact, with few exceptions, the care of patients in unaffiliated municipal hospitals is in the hands of foreign-trained physicians from institutions with standards far different from those in this country."

Another paradox, or something, for the high-paying patient is presented if he endeavors to figure out why Blue Cross sought unsuccessfully to get an increase of something like 37 percent in its insurance rates in the New York metropolitan area. And he can get muddled up much further by the report that a new plea for a "substantial" increase is likely to be granted, because the report on a Columbia University study of New York state's eight Blue Cross hospitals, while setting forth the need for more and better services, had at least a bit to say in favor of some increase in rates. The puzzler can find more to dig into in the various recent comments on the unsatisfactoriness of ambulance services in the city.

For health services, New York is not entirely dependent upon the functioning of municipal institutions. But, on the whole, its needs in that field are not being satisfactorily met. That is true of many, if not most, other communities of all sizes throughout this country. That is a matter to which local business executives, as individuals and as members of vocational, fraternal, or religious groups, should give adequate appropriate remedial attention—starting in their own establishments.

Washington Talks It Over

Chemical Leaders Advise Commerce Department Officials of Difficulties in Doing Business Abroad, And Thereby Provide Grist for the GATT Negotiators' Mill.

By Ralph L. Cherry
Washington Editor

Commerce department officials have been talking with specialized groups from the chemical industry since last April on some of the problems American producers run into when they try to broaden their field of operations by moving into world markets.

From the viewpoint of the officials, the talks have been quite successful and highly productive.

They report that they have gathered enough grist to supply the American negotiators at the upcoming Geneva GATT (General Agreement on Tariffs & Trade) conferences with some mighty strong arguments in favor of a little more "giving" on the part of the other countries in return for the "taking" in the process of tariff bargaining.

This is the first time that American producers have ever had a real chance to tell their side of the story of the difficulties in selling abroad since the reciprocal trade program was instituted in 1934.

While it is true that the door has always been open to US producers to discuss these problems at the hearings before the Committee for Reciprocity Information on the GATT list, no real point was ever made of this. Mostly, witnesses have been more concerned with convincing the committee to knock products off the list.

This year, considerably more emphasis is being placed by the government on impediments to US world trade. The conferences held by the Commerce department have stressed this fact. Also for the first time, the State department, when it released the proposed GATT product list last June, publicized a list of commodities on which it would seek foreign tariff reductions.

Actual negotiations that will be conducted at Geneva will be done by a team of State department officials, headed by Undersecretary of State C. Douglas Dillon and Assistant Secretary of State Thomas Mann. They will be accompanied by a large staff of specialists from the Department of Commerce, Agriculture, Interior, State and Labor.

While other countries permit industry representatives to sit in as advisers during the negotiations, this practice has never been adopted by the US. The US chemical industry interests will be watched over by Lowell Kilgore, chief of the chemical division of Business & Defense Services Administration, and possibly by Frank Gonet, chief of the chemical division of the Tariff Commission.

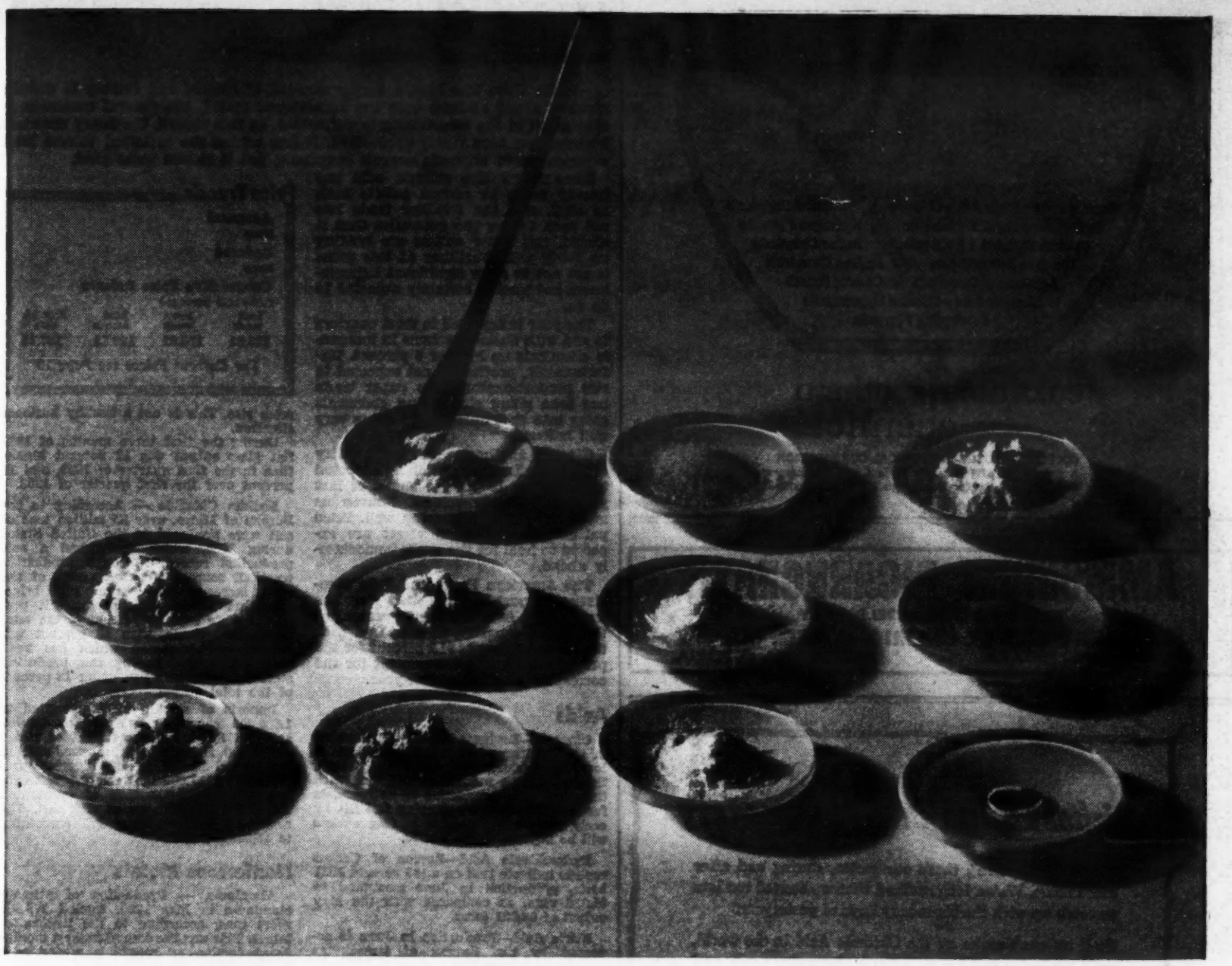
OPD'S BOOKSHELF

Man in Motion

ENERGY AND MAN—A SYMPOSIUM * is a collection of the papers presented last year at a symposium co-sponsored by the Graduate School of Business of Columbia University and the American Petroleum Institute. Designed to serve as part of the commemoration of the centennial of the oil industry, the symposium constitutes an inquiry into the role of energy in the past, present and future of mankind.

Some of the authors and papers included are Dr. Allan Nevins, noted Columbia historian, "Energy in the History of Western Man"; Robert Dunlop, president of Sun Oil Company, "The Petroleum Revolution"; Dr. Edward Teller, noted nuclear physicist, "Energy Patterns of the Future"; Dr. Edward Mason, Harvard University economist, "Low Cost and Abundant Energy," and Herbert Hoover, jr., "Energy and Public Affairs."

* ENERGY AND MAN—A SYMPOSIUM. Appleton-Century-Crofts, Inc., New York. $3.75.



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*Federal Register, 10/29/59: 8792

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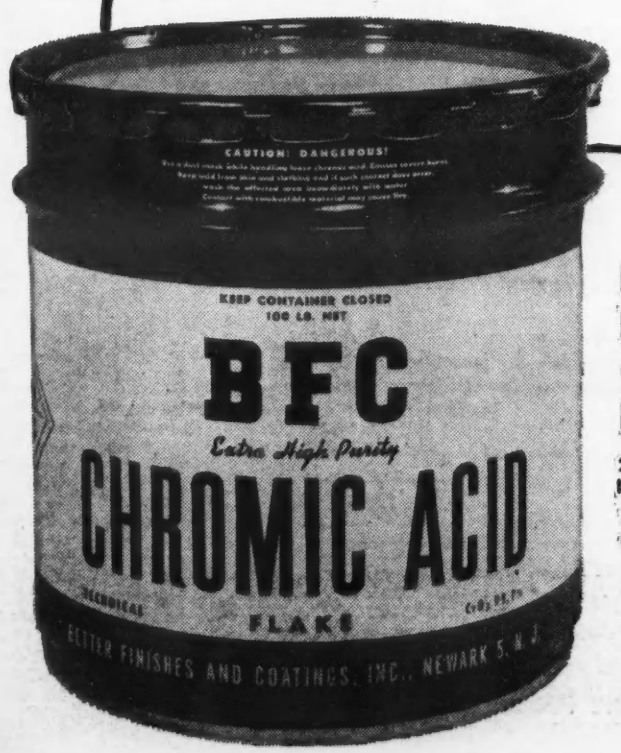

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Heavy Chemicals

While these has been a goodly amount of fussing and fuming in certain quarters about business over the June-August period, the general consensus is that much of the complaining is unfounded. In fact overall, the heavy chemical business has been pretty good. True, it lags behind the sustained volume level experienced in aliphatic organic chemicals, but it is still quite good.

Some items like sulfuric acid are heavily down in certain outlets such as steel, and the fertilizer trade has not been taking the quantities that it should, but other outlets are holding up fairly well. Fertilizer at this point is not apt to show significant improvement, but steel is certainly expected to do so.

The year is expected in most quarters to end with business volume in inorganic chemicals up by 5 or 6 percent. Unfortunately, profits are not expected to rise proportionately. The paper trade has been going strong, and chemicals going into that industry are doing very well indeed.

Glass is another consuming industry of heavy chemicals which is expected to run some 10 percent ahead of last year in business volume. Nonferrous metals are generally doing well. Price patterns previously in effect are expected to hold for the weeks immediately ahead.

The American Paper and Pulp Association reported production for the week ended August 5 at 85.9 percent of theoretical capacity, as compared with the revised figure of 91.2 percent for the previous week and 95.7 percent for the corresponding week of last year.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 14, 1959
106.81	106.81	106.86	107.18

For Current Prices see Page 10

Acids

Chromic—Business has been somewhat in the doldrums in recent weeks due to lowered business volume coming from the automotive industry. However, with the step up in production of new models for 1961 likely to be running full tilt by early September, chrome plating outlets will be buying more chromic.

Hydrochloric Acid—Bureau of Census reports indicate that on a 100 percent HCl basis, production in June amounted to 81,936 tons, as compared with the May output of 90,021 tons.

Nitric Acid—Production in June is reported by the Bureau of Census as amounting to 234,603 tons on a 100 percent HNO_3 basis, as against some 265,080 tons turn out in May.

Phosphoric Acid—On a 100 percent P_2O_5 basis, the Bureau of Census reported June production at 171,230 short tons, compared with the May output of 189,947 tons. Supplies are quite adequate and prices firm.

Sulfuric Acid—June output of sulfuric acid, on a 100 percent basis, amounted to 1,495,438 tons as against a revised May production of 1,614,152 tons. Price patterns last week remained just about as they had been. The same firm prices prevailed in certain geographical areas, and the same price shading that has long been the pattern in certain other geographical areas continued at the same level.

Supplies are abundant and some pickup is hoped for from the steel industry which last week turned out an estimated 1,556,000 tons with an operating rate of 54.6 percent of capacity. The feeling is rather general that steel operating rates will go up fast in September because of new automobile production, and Fall should bring some improvement in tonnages on "heavy steel."

Bases and Salts

Soda Ash—Glass making has been good all year, and is expected to continue so. This is good for the soda ash business. Flat glass production is estimated by the Business and Defense Services Administration to be likely to run 10 percent higher in 1960 than in 1959, and it may reach a record level of some $550 million. Business in 1959 was good, too, totalling some $500 million, reversing a three year downward trend, and exceeding the previous all time high of 1955 by some 11 percent.

The biggest complaint that can be made about soda ash is that it is essentially unprofitable. Prices are far too low in relation to the great accumulation of costs of production which have been building up over recent years. Yet, the market seems to be too competitive to allow a price rise. This is not a healthy business situation.

During the first three months of 1960 flat glass output was 12 percent higher than in the first quarter of 1959, and 18 percent over the first quarter of 1958.

Sodium Chloride — According to the Bureau of Mines, over 25 million tons of salt were produced in the United States during 1959, which established a new production record. Although production from all sources increased, most of the 1959 increase came from salt brine. Louisiana became the leading salt producing state with 19 percent of the total production. Texas, with 18 percent was second, and Michigan which has been traditionally the leading salt producing state was third with just under 18 percent of the total output.

Imports of salt in 1959 amounted to 1,025,000 short tons. World production stood at 88,900,000 short tons, of which 25,160,000 short tons were produced in the United States. Of the domestic production, 10,137,000 tons was dry salt consisting of 3,977,000 tons of evaporated salt and 6,190,000 tons of rock salt. The remainder was in brine salt amounting to 15,023,000 tons.

Nonferrous Metals

Aluminum — Production of primary aluminum in May 1960, totaled 175,863 short tons, according to the Bureau of Mines. This was the second highest monthly production on record, exceeded only by the 179,194 tons produced in July 1959.

Shipments of 166,403 tons from producers' plants in May represented an increase of 15 percent or 22,000 tons compared with the April total. On May 31 stocks held by the producers were 33 percent more than at the end of December 1959 and, based on the May production rate, represented a 26-days supply.

During the early part of the month hearings were held by Subcommittee No. 3 of the Select Committee on Small Business of the House of Representatives. Testimony was presented which included among other items, discussions of pricing practices, hot metal deals, and scrap exports.

Chromium—Total consumption of chromite in May decreased almost 11 percent compared with June, according to the Bureau of Mines. Consumption for metallurgical purposes dropped 17 percent, and refractory consumption was off 3 percent, while chemical consumption was up over 5 percent.

Domestic production of chrome ores in 1959 totalled 105,407 short tons. During the first five months of 1960 domestic production amounted to 41,509 short tons. Imports of chromite in 1959 totalled 1,553,546 short tons. During the first five months of 1960 imports totalled 514,826 short tons. Domestic production in May was 8,393 short tons of 38.6 percent Cr_2O_3 material, all from the State of Montana.

Fluorspar—Crude material produced from domestic mines totalled 109,400 short tons, during the first quarter of 1960, according to the Bureau of Mines. Fluorspar mills processed 114,300 tons of crude ore from which 46,500 tons of finished fluorspar were recovered in the first quarter. Shipments during the quarter totalled 49,100 tons having an overall value of $2,297,200.

Imports of fluorspar were 7 percent below imports for the first quarter of 1959, while industrial consumption was up 17 percent in 1960 over 1959 first quarter period. Total fluorspar consumption amounted to 177,039 short tons, of which

49,053 were from domestic production and 111,636 from imports.

Magnesium—The Bureau of Mines reported commercial production of primary magnesium during the second quarter of 1960 as 9,605 tons. This was 530 tons below the first quarter output, but total production for the first half of the year was 54 percent above that of the first six months of 1959. The electrolytic plant at Freeport, Texas, and the silicothermic plant at Canaan, Conn., and Selma, Alabama were in production.

Total magnesium output for the first six months of 1960 amounted to 3,075 tons, as against 2,778 tons during the corresponding period of last year. The base price of primary magnesium ingot in standard 42-pound pig form remained at 35¼ cents per pound f.o.b. the above mentioned plants.

Shipments of magnesium in the second quarter of 1960 were 180 tons below first quarter shipments, but for the first half of 1960 totalled 10 percent more than shipments during the first half of 1959.

Selenium—Domestic selenium production and selenium compounds, according to the Bureau of Mines, amounted to 177,946 pounds of contained selenium, during the second quarter of 1960.

Plant Food Institute Adds To Its Membership Roster

Eight companies have just been voted into membership in the National Plant Food Institute. They are:

Central Resources Corporation, New York; Crystal Chemical Company, South Sioux City, Neb.; Goodpasture Grain & Milling Company, Brownfield, Tex.; Kickapoo Valley Chemical Company, Atlanta, Ill.; Minnesota Liquid Fertilizer Company, Minneapolis, Minn.; Phinneys, Larned, Kans.; Plainsman Fertilizers, Inc., Plainview, Tex.; and Tri State Fertilizer Company, Burlington, Iowa.

Alcohol Innocent Enough

—*Continued from page 5*

noiac about having "chemicals" put into his food should exclaim "Ah smell that fresh natural aroma of roasting coffee."

The chemist who knows his aromatics can reply:

"Ah, yes, smell that fresh aroma of volatilized acetaldehyde, acetone, acetyl propinyl, butyraldehyde, carbon disulfide, diacetyl, dimethyl sulfide, ethanol, ethyl formate, furan, hydrogen sulfide, isobutyraldehyde, isoprene, isovaleraldehyde, methanol, methyl acetate, methylbutyraldehyde, methyl ethyl ketone, methyl formate, methylfuran, methyl mercaptan, pentadiene, propionaldehyde, thiophene, etc.!"

The compendium appears in "What's New in Food & Drug Research," a monthly publication of Food & Drug Research Laboratories, Inc, New York.

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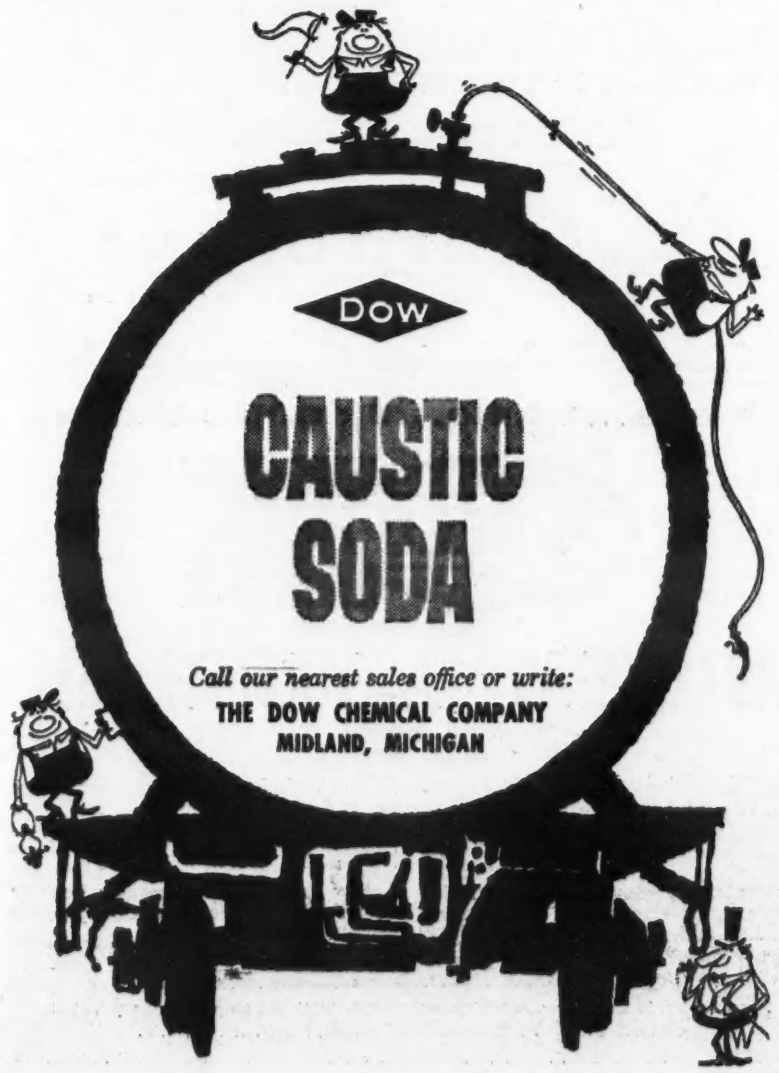

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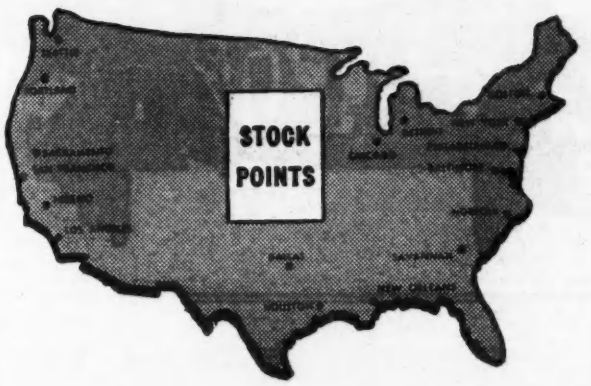

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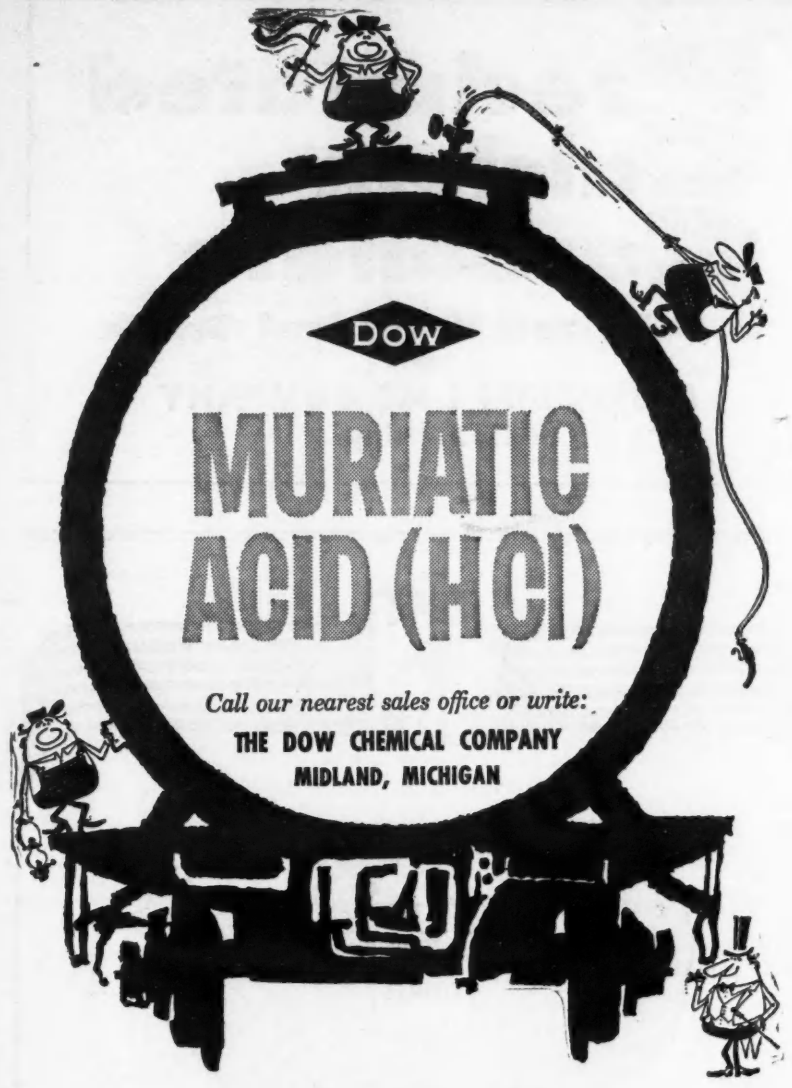

Obituaries

Howard T. Jensen

Howard T. Jensen, retired vice-president and general manager of Eli Lilly & Co. (Canada), Ltd., died August 3 in Glendale, Calif. He was seventy-four years old.

Mr. Jensen joined Eli Lilly as a salesman in 1911 and became manager of the Pacific Coast sales division in 1924. In 1928 he went to Shanghai as manager of Lilly's former branch there. He later traveled for the company in Korea, Hong Kong, Malaya and Siam.

When Lilly's export subsidiary was established in Toronto in 1938, Mr. Jensen was selected to manage operations in Canada. He was director of the Canadian Pharmaceutical Manufacturers' Association for a number of years.

Hans A. Vogelstein

Hans A. Vogelstein, former president of American Metal Climax, Inc., New York, died August 6 in New York. He was fifty-six years old.

Mr. Vogelstein gave up the leadership of the company last year because of ill health, but continued as chairman of its finance committee. He was a governor of the New York Commodity Exchange from 1940 to 1957 and at his death was a director and president of the Commodity Exchange Metal Clearing Association.

Plastic Output Up

—Continued from page 4

million pounds in 1958. The output of phenolic and other tar acid resins in 1959 amounted to 625 million pounds, compared with the 488 million pounds reported for 1958.

Sales of these resins in 1959 amounted to 555 million pounds, valued at $154 million, compared with 440 million pounds, valued at $117 million, in 1958.

Production of urea and melamine resins in 1959 amounted to 421 million pounds. Sales of these resins in 1959 were 384 millions pounds, valued at $115 million, compared with 326 million pounds, valued at $97 million, in 1958.

The output of cyclic pesticides and other chemicals included in the cyclic group amounted to 469 million pounds in 1959—about 5 percent more than the 445 million pounds produced in 1958. Sales in 1959 were 410 million pounds, valued at $172 million compared with 378 million pounds, valued at $148 million, in 1958.

The chemical in this group which was produced in the greatest quantity in 1959 was the insecticide DDT. The output of this product in 1959 amounted to 157 million pounds, a record high.

Production of acyclic pesticides and other acrylic organic agricultural chemicals in 1959 amounted to 116 million pounds, compared with the 95 million pounds reported for 1958.

Sales in 1959 were 93 million pounds, valued at $52 million, compared with 89 million pounds, valued at $48 million in 1958.

Bids Wanted

Acetone Technical, Calibrating Fuel System. Methyl Ethyl Ketone Technical, Naphtha Aliphatic Type II, Naphtha Aromatic, Type II, Thinner Synthetic Resin Enamel, Toluene Technical—various quantities to various destinations—IFB 61-8 Bid opening Aug. 17. Bids invited by Military Petroleum Supply Agency, Washington, D. C.

Chromium Trioxide, Spec Fed O-C-303B Type II—237,000 lbs.—IFB 155-157-61B, Aug. 22. Bid invited by General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

DDT, 75 percent water dispersible powder—IFB FN-4N-28532-A—599,000 lbs.—Bid opening 8-23-60. Bid invited by General Services Administration, Region 3, Business Service Center, 7th & D sts., S. W. Washington 25, D. C.

Gas, Propane Liquid, Commercial (Bulk) Indef. Qty. contract for period Sept. 15, 60 through June 30, 1961. 743,860 gals.—(USAF Stk No. 9120-NL52982-200) IFB 48-608-61-5B—Bid opening Aug. 18. Bid invited by Base Procurement Office, Bldg. 200, Francis E. Warren Air Force Base, Wyo.

Nitric Acid, 60 percent HNO_3 content, 60 percent basis, to be furnished in Government owned tank cars. Potential bidders may obtain copies of invitation by contacting Chief, Procurement Branch, P. O. Box A, Aiken, S. C.—8,000,000 lbs.

Sodium Hydroxide, Spec Fed P-S-631B Amend 1 Type I—218,256 cans. IFB 155-118-61B — Bid opening Aug. 22. Invited by General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

SRO 61-1C—Bid opening 8-18-60. Bid invited by U. S. Atomic Energy Commission, Augusta, Ga.

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Dihydroxyacetone Process Is Awarded Patent Rights

US patent rights on a fermentation process for making dihydroxyacetone—a tanning agent in artificial sun-tan products—have been issued to Wallerstein Company, Staten Island, N.Y., a division of Baxter Laboratories, Inc.

Makers of lotions that react with the skin to provide a sun-tan effect are the principal customers for dihydroxyacetone. Trade sources estimate that these new cosmetics are selling at the rate of several million dollars per month.

Synthetic Resin Facility Is Planned for Portugal

Two Japanese firms, Shinetsu Chemical Industry Company and Mitsui Bassan Company, plan to build a plant in Portugal for the production of synthetic resins.

These firms will work with two Lisbon firms, Uniao Electrica Portuguesa SARL and Banco Pinto & Sotto Mayor. The new company will be called the Companhia Industrial de Resinas Sinteticas SARL, will be capitalized at 50 million escudos ($1.75 million), and have a capacity of 3,600 tons a year.

Polyethylene Looms

—Continued from page 3

parent firm reports that the new Japanese plant would use the high pressure polyethylene process developed by A.G. fur Olfin-polymerization (AGFO Process).

The principal licensor of the AGFO process, Scientific Design Company, New York, recently concluded a contract authorizing Dow's Swiss subsidiary, Dow Chemie A. G., to use the AGFO process for high pressure polyethylene in several countries on a non-exclusive basis for the benefit of its manufacturing subsidiaries and associated companies.

In the case of Japan, however, Scientific Design agreed that the license be granted exclusively to Asahi-Dow.

Since the proposal also includes the use of Dow know-how in the fields of polyethylene manufacture and fabrication, Asahi-Dow has been able to present a fully integrated proposal to the Japanese government.

The new chemical plant in Ohio is expected to be completed in June. It will produce "Ethafoam," the trademark name Dow has given to its polyethylene foam.

Raw materials for the new plant—polyethylene—will be supplied by Dow's Texas Division at Freeport,

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If you buy chemicals, you can use Hooker Bulletin 100-D, a handy 16-page organizer of buying data on Hooker chemicals. It describes alkalies, acids, chlorine derivatives, sulfur compounds, and organophosphates, giving physical data, uses, and shipping containers. Also included are a number of new development products and the inorganic phosphates produced by the Phosphorus Division. Write for your copy.

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in textiles
as a fixing agent in textile dyeing and calico printing.

in chemical formulas
as raw material to make chemicals and copper compounds.

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as a flotation reagent in the milling of lead and zinc ores.

in paints
as a starting material for making green and blue pigments.

For information on how Triangle Brand Copper Sulfate can be applied to your operation, write:

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Coaltar Color Definitions Discarded by FDA Action

Extensive hearings in 1958 by the Food & Drug Administration on the definition of coaltar colors have been ditched by the agency and the entire proceedings washed out because of the enactment of the new color additives law.

An order, formally abandoning the proceedings, was issued by the agency last week.

The hearings involved the question of whether certifiable coaltar colors should be defined to include any color capable of being produced from coaltar though it might be from some other origin. Application of this broad definition was fought during the hearings by Hoffmann-La-Roche, Inc., Nutley, N. J., because the definition embraced the company's beta-carotene, a non-coaltar color.

Montecatini Absorbs Firm And Also Increases Stock

The Montecatini interests, Milan, Italy, have approved the merger into Montecatini of Vetrocoke Company and have also okayed a 50 percent increase in the company's capital stock.

Vetrocoke is located in Venice and is a manufacturer of nitrogen fertilizers, glass and coke products. The stock transaction represents an increase in authorized capital of 50 million shares of the par value of 1,000 lire each.

Corrosion Controller

—Continued from page 5

immediate application in storage tanks, tank cars, trucks, barges and process vessels.

Conoco said it first tested the system in a sulfonation unit at its Baltimore, Md., petrochemical plant, and found that it substantially eliminated vessel and related piping corrosion. Other successful installations, Conoco added, have been made at the company's plants in Chicago and Gretna, La.

In principle, the "Anotrol" system is said to make mild steel or alloy steel internal surfaces of vessels resistant to such chemicals as sulfuric, phosphoric and nitric acids; sodium and potassium hydroxide; and aluminum sulfate and ammonium nitrate by developing a passive film on metal surfaces exposed to these corrosive liquids and maintaing this film with an electric current.

Honeywell said manufacture and marketing of the system, which makes use of electronic circuitry, has been assigned to its Rubicon division in Philadelphia, a producer of calibration and test instruments.

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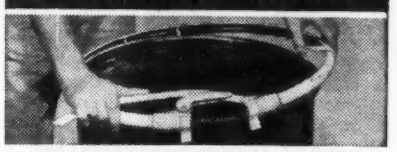
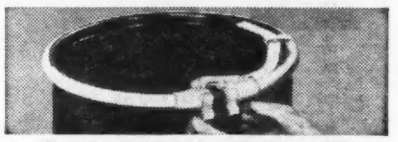
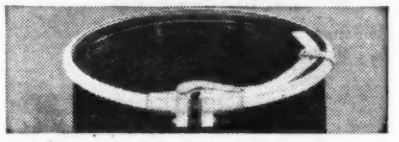


1. Apply ring to drum.



2. Clamp lever in place, insert bolt and apply nut.



3. Tighten bolt for finished job.

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DuPont Intends to Build New Lab at Chestnut Run

A new $2 million sales service laboratory will be built at Chestnut Run near Wilmington, Del., to assist customers and develop new uses for industrial chemicals made by the industrial and biochemicals department of E. I. duPont de Nemours & Co.

Thomas H. McCormack, general sales director, says the new laboratory will make possible expansion of the industrial and biochemicals department's customer service and sales development program, with greater emphasis on existing industrial product lines.

These include adhesives, adipic acid, "Ludox" colloidal silica, sulfamic and hydroxyacetic acid, "Quilon" chrome complex, dimethyl sulfate, dimethylformamide solvent, "Volan" bonding agent, cyclohexanol, cyclohexanone, methylamines, and propionates.

Scheduled for completion late next year, the two-story laboratory will contain physical testing and analytical laboratories, demonstration areas, offices, and service facilities.

It will be the eighth laboratory on the 160-acre Chestnut Run site, joining buildings previously constructed for textile fibers, plastics, packaging and industrial films, elastomers and "Freon" products, pigments and electrochemicals products.

Reichhold Flies Home

—Continued from page 5

an initial capacity of 50 million pounds, with planned expansion to 100 million pounds annually.

• Attended dedication ceremonies at a new phthalic anhydride plant in Switzerland, which is soon to go on stream.

• Witnessed the dedication of a new research and development building at Hausen bei Brugg, Switzerland.

• Was present at opening ceremonies at a new "Plasticenter" for research and development in Hamburg.

• Saw the corner-stone laying ceremonies for a new plant in Niort, France, which will produce maleic anhydride at the rate of 10.5 million pounds a year under a Scientific Design Company process. The capital of the French associate, Mr. Reichhold has announced, is now up to 12 million francs, from 6 million.

• Attended stockholders' meetings of the following associates: Reichhold-Beckacite S.A., in Paris; Reichhold Chemie A.G., in Zurich; Reichhold Chemie A.G., in Hamburg; Reichhold Chemicals, Ltd., in London, and Reichhold-Beckacite A.G., in Vienna. (Since then all Reichhold interests in Vienna have been formed into Reichhold Chemie A.G.)

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Typical applications are as flatting agents in finishes, bodying agents, as insecticides, flow modifiers, and absorbents.

Price per Pound f.o.b. Chester, Pa. Trademarks Reg. U.S. Pat. Off.

Product	Truckload and Over	Less Than Truckload			
	Minimum 10,000 lbs.	1000-9975 lbs.	600-975 lbs.	200-575 lbs.	25-175 lbs.
Quso F 20	$.55	$.60	$.65	$.70	$1.35
Quso G 30	.55	.60	.65	.70	1.35

Package—Multiwall paper bag; 25 lbs. net.

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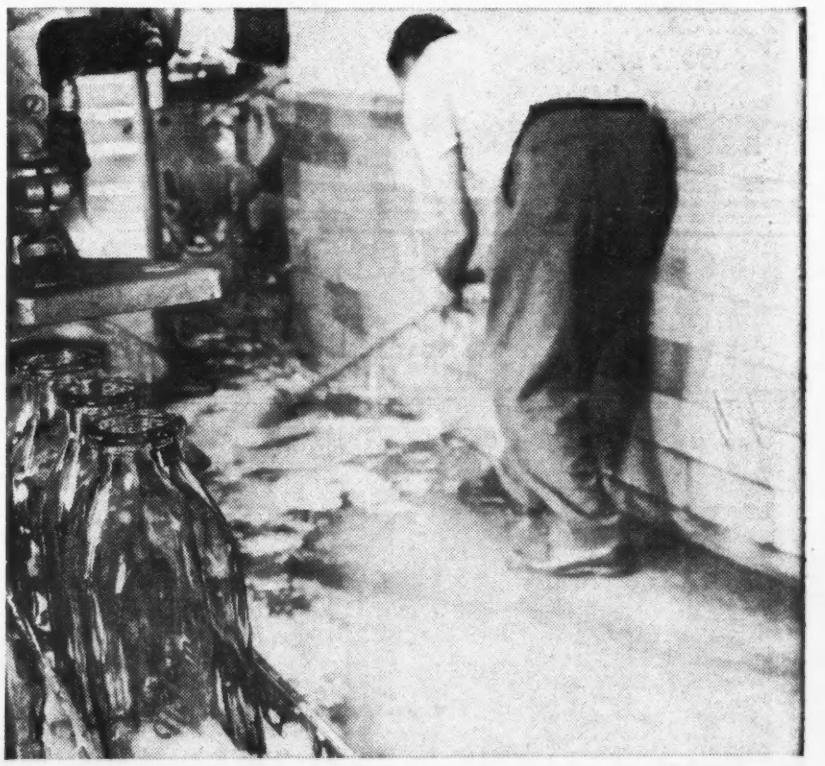

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Agricultural Chemicals

Imports in June of farm chemicals declined in most cases from May arrivals. Sharp drops in import volume were noted in Bureau of Census reports for ammonium nitrate, ammonium phosphate, ammonium sulfate and potassium chloride, crude. Increased volume was indicated for sodium nitrate, phosphates, fishmeal and scrap and dried blood. Declines in most cases are seasonal and represent material being imported for use before the end of the direct application period in late July.

Market conditions are in general unchanged from previous reports. Only notable activity was in natural organics where wet process tankage was dropped 50 cents a unit-ton in New York. Fishmeal and scrap also are down with meal at $93-$94 a ton and scrap at $89-$90. These are a seasonal conditions which occur usually in August as warm weather saps demand and depresses the feed market generally.

A method for the direct use of liquid phosphorus as a fertilizer has recently been patented. As described in the patent, phosphorus is injected under pressure into the earth as a liquid whereupon it solidifies and combines with oxygen.

It is reported by the inventor that the liquid phosphorus will have no harmful effects on seeds or growth of roots if properly applied.

The Tunisian government is inviting bids until September 10th for the construction of a plant in Tunis to produce fertilizer from city refuse. Projected capacity of the proposed plant is to be 250 tons per day of organic fertilizer.

Crop volume is headed for a record this year. That's the opinion of Department of Agriculture. USDA's index of production is forecast to be 119 percent, or 1 percent higher than the record years of 1958 and 1959.

Foremost in production gains this season are food grains, oil and seeds.

Down from last year's totals are livestock feed grains, fruits and vegetables.

Favorable weather is held responsible for the upturn in crop production. Continued clement weather throughout the imminent harvest season may push crop figures even higher than presently estimated.

On a less happy note, USDA reports that bugs, bacteria, *et al.*, destroy $10 billion worth of food production annually.

Animal and Plant Foods

Ammonium Nitrate—Activity continues on the downside with reports indicating the seasonal slack period is full upon the market.

Off season prices have done nothing to bolster the market as yet, although informed sources feel confident that September will see a return to buying as the first step increase goes into effect October 1st.

Price now through September is $64 a ton. October 1st price will be $67 which will hold until the first of the year when $70 will be the schedule.

Ammonium Sulfate—One producer reports the market quiet at present and other trade comments indicate this is the consensus of opinion. With direct application time at an end for the summer, producers are looking forward to the next season before any pickup of activity can be expected.

Prices remain unchanged in all grades from previous postings.

Lime—Material sold and used in May totaled 1,064,139 short tons, according to Bureau of Mines.

In agricultural uses 7,706 short tons of quicklime were used and 14,462 short tons of hydrated lime for a total in May of 22,168 short tons. This represents a decrease from April's figure of 28,613 short tons and a decline from May 1959 usage which was 23,693 short tons.

During the period January-May this year 75,890 short tons of lime have been used for agricultural purposes as compared with 94,987 short tons during the same period last year.

Tankage—A New York supplier is moving wet rendered tankage at $4.75 to $5 a unit-ton. Previous listing was $5.25 to $5.75.

This price decline is a seasonal one with the usual warm weather factors and change in production causing greater supply of material and thus greater competition for the lessened demand.

Price Trends

Advanced
None

Reduced
Fishmeal, $7 per ton.
Fishscrap, $7 per ton.
Tankage, animal, feeding, 9-11 percent ammonia, New York bulk, 50c. per unit-ton.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 14, 1959
109.97	109.97	109.97	111.14

For Current Prices see Page 10

Pesticides

Malathion—The use of malathion as a protectant of stored grains is being recommended by the Stored Products Insects Branch of USDA, according to the National Pest Control Association.

It is reported that premium grade malathion, used preferably as a spray, will provide as much as a year's protection against commodities stored under reasonable conditions to temperature, humidity and sanitation. Study of flavor, odor and baking qualities of flour from treated wheat reveals no adverse effects.

Commodities referred to by Department of Agriculture as stored grain normally include wheat, oats, rough rice, corn, rye, barley and grain sorghum. Research is continuing to determine if higher rates of application are needed for rough rice and sorghum stored in the South.

USDA cautions that malathion should not be considered a control for moderate or heavy insect infestation in grain. In case of moderate or heavy infestation, fumigation should be applied. USDA also notes that in long term storage malathion can be reapplied without exceeding tolerances.

Farm Chemicals Imports: June

Following are data compiled by the Bureau of Census indicating volume of imports of agricultural chemicals for May and June, 1960. Figures for ammonium phosphates and fishmeal and scrap account only for that material intended for use as fertilizer. All figures are in short tons.

	May	June
Ammonium nitrate (over 32 percent N)	11,022	5,048
Ammonium nitrate mixtures (32 percent N or less)	9,241	154
Ammonium phosphate	11,333	4,097
Ammonium sulfate	24,508	4,370
Calcium cyanamide	1,443	908
Castor bean pomace	[1]	[1]
Dried blood	281	530
Fishmeal and scrap	806	5,228
Guano	24	13
Nitrogen Solutions	5,526	[1]
Peatmoss (fert. grade)	34,103	24,509
Phosphates, crude[2]	14,954	25,371
Potassium chloride, crude	29,295	16,659
Potassium nitrate, crude	85	[1]
Potassium sulfate, crude	5,303	2,575
Sodium nitrate, crude and refined	48,235	63,822
Urea	8,192	5,493

[1] Figures not available.
[2] Including apatite and phosphate rock.

Petroleum Derivatives

Results of July sales of aromatic solvents to metal finishing and related industries are being studied with disappointment. In the words of one producer July was, "the last word." Apparently there are others who would agree with that comment. Evidence of a pickup in August and prospects of something approaching brisk business does seem due for September. Overall, however, third quarter balance sheets will not be as satisfactory as predicted by observers at midyear. Indicative of the disconcerted state of the metal finishing sector of the market is the high inventory being held by manufacturers of hard goods. In addition, despite the auto model changeover, several parts suppliers and subcontractors to two of the big three motor companies are shut down for lack of calls and the advance to rapid auto production is delayed beyond expectations.

Tariff Commission production report for May reveals declines in total output of BTX although petroleum producers advanced production of benzene to near the 27 million gallon mark.

Imports in June, as recorded by Bureau of Census, showed a nine-fold increase in shipment of benzene to the US. USSR was the major supplier, landing nearly 8 million gallons at Galveston and Detroit. Toluene imports dropped slightly and xylene shipments declined considerably from the previous month.

Benzene exports in June dropped over half a million gallons from May while toluene shipments hit 7.5 million gallons for a twelve-fold rise from May.

Free world petroleum demand totaled 17.8 million barrels daily in 1959, a gain of 6 percent over 1958, according to Chase Manhattan Bank. US demand was up 4 percent while other nations increased 9 percent.

Supply in 1959 exceeded demand, as is well known, a situation which continues to the present day.

Capital expenditures for petroleum in the Free World last year increased 5 percent over 1958 while earnings increased 9 percent.

The relative increase in earnings from 1958 was greater in US than abroad, reports the bank, due in part to record operating levels and more efficient use of facilities in handling higher volume.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Aug. 14, 1959
103.74	103.74	103.74	104.42

For Current Prices see Page 10

Aromatic Solvents

Benzene—Current market situation remains unchanged with tight supply and heavy demand being reported.

Production from petroleum sources continues at about the 26 million gallon-a-month level but heavy demand both at home and abroad is keeping stocks low and spot and export prices at high levels.

Tariff Commission report for May reveals 41,171,510 gallons being produced from all sources. April's production was slightly higher at 42,225,558 gallons.

By source, petroleum producers turned out 26,922,153 gallons, 108,917 gallons more than April.

Cokeoven operators produced 12,944,611 gallons in May, a decrease of 954,165 gallons from the previous month.

Tar distillers turned out 1,304,746 gallons, a decrease of 208,810 gallons from April.

Benzene imports in June totaled 9,730,801 gallons worth $2,455,251. May's imports were 1,128,120 gallons.

USSR was the major supplier with 7,976,424 gallons worth $1,951,753 arriving in the US. France was the only other shipper with 1,754,377 gallons valued at $503,498 being credited to her.

Exports in June were computed at 1,533,044 gallons worth $560,563. Major recipients were:

W. Germany 779,775 gallons worth $262,761.
Canada 303,644 gallons worth $137,303.
Mexico 232,252 gallons worth $77,704.
Italy 128,253 gallons worth $43,561.
Brazil 39,970 gallons worth $14,485.

Toluene—This solvent continues in a firm position with active calls being noted in export and some domestic areas.

After a weak month for exports in May, June's figure multiplied twelve fold.

Demand for toluene for use in upgrading motor fuel and for use in pesticides is at peak volume adding strength to the domestic sector of the market.

Prices remains stable at 25c. a gallon, delivered east of the Rockies.

Toluene production in May dropped 2.5 million gallons from April. May's total output was placed at 19,915,723 gallons by Tariff Commission as against a revised figure of 22,417,741 gallons for the previous month.

Production from petroleum sources in May totaled 16,753,258 gallons as against a revised figure of 19,182,496 for April.

Cokeovens and tar distillers supplied the balance with cokeoven production declining slightly and tar production advancing slightly.

Imports in June totaled 497,931 gallons valued at $96,629. Canada was the sole country of origin.

Exports in the same period totaled 7,510,425 gallons valued at $1,380,165.

Xylene — Imports of xylene in June totaled 105,262 gallons worth $25,212.

Canada supplied 105,155 gallons valued at $24,861 while Switzerland accounted for the balance of 107 gallons.

Xylene production declined 813,661 gallons in May from the previous month. May's figure was reported to be 26,997,421 gallons and April's, 27,811,082 gallons.

Petroleum producers and tar distillers reported an output of 26,343,002 gallons, 586,917 gallons behind April, and cokeoven operators, 649,419 gallons, some 126,744 gallons behind April's production.

Aliphatic Solvents

Aliphatic naphthas, mineral spirits, solvents and other finished light aliphatic products were exported in June to the amount of 63,430 barrels valued at $703,308.

LPG's

Ethane-Ethylene — Production in the first two weeks of July totaled 21,431,000 gallons as against 22,149,000 gallons in the previous two weeks.

Miscellaneous

Current reports of the industry for the week ended July 29, 1960 indicate a decrease in crude-oil production and an increase in crude runs. According to the API, the daily average output of crude (including lease condensate) was 6,821,000 barrels, a decrease of 34,000 barrels from the preceding week. Daily average crude runs to stills of 8,290,000 barrels were 86,000 barrels above the preceding week, and 293,000 barrels above the week ended July 31, 1959. Runs of foreign crude amounted to 1,095,000 barrels daily, compared with 1,132,000 barrels in the preceding week. For the four-week period ending July 29, crude oil production averaged 6,835,000 barrels daily, and crude runs to stills averaged 8,258,000 barrels daily with runs of foreign crude averaging 1,096,000 barrels daily.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended July 30 totaled 242,821,000 barrels according to data reported by the Bureau of Mines. Compared with the total of 244,916,000 barrels the preceding week, this represents a decrease of 2,095,000 barrels, comprising a decrease of 1,822,000 barrels in stocks of domestic crude and a decrease of 273,000 barrels in stock of foreign crude.

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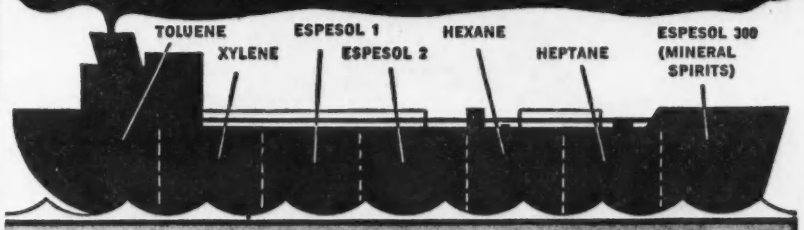

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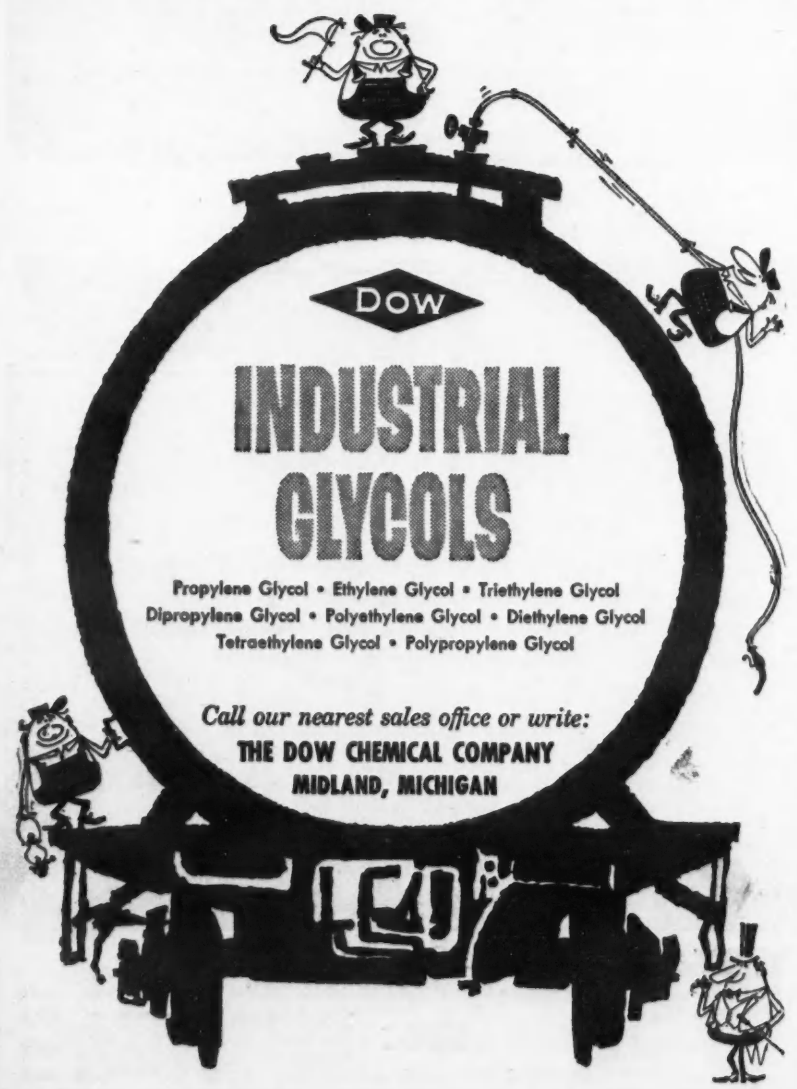
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Aliphatic Organics

June imports of ethyl alcohol amounted to 788,992 gallons, significantly lower than May volume (2,365,766 gallons) while upping the six-month cumulative total to a record-breaking 13 million gallons. As in several previous months this year, inshipments in June came solely from Brazil and entered the US at Galveston, Tex. The entire quantity was valued at $159,345, dutied at $59,174, according to statistics just released by the Foreign Trade & Economics Operations Division of the Bureau of Census, US Department of Commerce.

Exports of ethyl alcohol, on the other hand, zoomed to 3,101,190 gallons in June from a mere 2,050 the preceding month. Excepting 1,190 gallons that left New York, Argentina-bound, this material travelled from Philadelphia to West Germany, which country, incidentally, hasn't bought US alcohol since 1958.

Less than carload prices for USP ethyl alcohol were boosted 5 to 10 cents a gallon, August 1. A spot change, it will not effect contract buyers until next quarter.

According to schedules issued by three major producers last week, 190-proof alcohol, tax paid, is now listed at $20.73 a gallon in lots of 18, 54-gallon drums, and at $20.84 in smaller drum quantities. On a tax-free basis, corresponding quotations are 78 cents and 89 cents a gallon, respectively. (Prices apply to deliveries in all states except Oregon, Idaho and Washington.)

Cuba recently sold an additional 20 million gallons of 1960-crop blackstrap molasses at 8 cents a gallon f.o.b. Havana. Half of this, it's said, will go to a firm headquartered in England, while the other half will go to a US firm.

Interestingly enough, the British buyer has a US subsidiary, forcing the inevitable question: Is the entire 20 million gallons destined for the US market and if so for what end-use? Observers feel the Cuban molasses probably will be channeled to feeds or citric acid, and, not as one might suspect, to alcohol production.

Acetic Acid—Imports of acetic acid rose from 502,840 pounds in May to 623,930 pounds in June. All of this material, which was valued at $46,266 and dutied at $3,302, came from Canada.

Our Canadian neighbor was also the source of the 6,650 pounds of acetic anhydride imported in June. According to the Census bureau, the total shipment was valued at $1,147 and dutied at $99.

Butadiene—Production of all types of synthetic rubber—in which butadiene is an important raw material—totaled 122,547 long tons (2,240 pounds to a ton) in June, compared with 126,804 tons in the previous month and 106,716 tons in June 1959, the Census bureau reports.

The same source also notes that stocks of natural and synthetic rubbers held by industry at the end of June amounted to 302,637 long tons. This compared with stocks of 310,025 tons on May 30, and 264,296 tons the year before.

US consumption of new rubber in June, Census says, was 138,425 long tons, as compared with 133,256 the previous month and 139,596 tons in June, 1959.

Carbon Disulfide—Carbon disulfide is currently quoted at 5.20c. per pound in tankcar quantities delivered. This price was established midway through the first quarter. Initially, it was offered as an aid to the rayon industry, which was hard pressed by competitors—particularly nylon in the tire cord market—but the split schedule, one price to the rayon people, another and slightly higher price to other users, didn't work out too well and eventually the 5.20c. per pound price was extended to all customers.

In the tire cord market, competition between rayon and nylon cord manufacturers has grown more intense, and this, of course, has led to a series of price cuts.

Two weeks ago, rayon cord manufacturers extended a price reduction originally intended to apply only to shipments made in August. Last week, in what amounted to a counter-move, two major nylon cord manufacturers announced price cuts ranging from 2c. to 5c. per pound depending upon the yarn denier, to be effective August 11. What the battle is all about: domination of the $300 million a year market.

Sources noted that this third round of reductions was touched off not by the nylon people, as usually happens, but by an intra-trade fight on the part of the rayon cord manufacturers.

Although nylon reportedly has made quite deep inroads into the replacement tire market, rayon tires will remain as original equipment on all 1961 model passenger cars.

Formic Acid—The Netherlands, Italy and West Germany shipped a total of 278,132 pounds of formic acid to the US in June. This material was valued at $18,536 and dutied at $6,667.

The biggest supplier was The Netherlands, shipping 189,902 pounds at $11,930. Italy, in second place, accounted for 57,944 pounds at $3,629. West Germany supplied the remainder—30,286 pounds at $2,977.

Glycerine—Entering July, glycerine producers held stocks amounting to 64.5 million pounds. This represented about a 95-day supply, the highest stocks have been this year in terms of estimated future demand. Actual volume of stocks was higher on June 1 when producers held 67.3 million pounds.

Glycerine imports in June totaled 831,312 pounds and were valued at $142,022 and dutied at $1,770. Material came from our offensive neighbor to the southeast, Cuba, and from the Philippines.

Cuba supplied 400,389 pounds, which was valued at $68,650 and dutied at $1,598, according to the Census bureau, while the Philippines shipped 430,923 pounds, valued at $73,372 and dutied at $172.

Molasses—Prices of blackstrap molasses at New Orleans rose ½c., to a range of 10c.-10½c. per gallon during the week ended August 9. Similar sharp advances were noted at Texas ports, Mobile and Florida markets a week earlier.

Behind this latest show of strength, according to Agricultural Marketing Service, was concern over future availability of Cuban supplies. Demand, AMS said, was generally slow to moderate.

Imports of molasses from Cuba during the first five months of 1960 totaled 104 million gallons. This was substantially higher than the 89 million gallons imported during the corresponding period a year ago.

Total imports from all countries, January thru May, were 204 million gallons,

Price Trends

Advanced
Molasses, New Orleans, ½c. per gal.

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 14, 1959
132.09	132.09	132.08	130.49

For Current Prices see Page 10

Aliphatics Foreign Trade: June

Imports of selected industrial aliphatic organics for the months of May and June, 1960, as reported by the Bureau of Census, were as follows:

		June	May
Acetic acid (over 65 percent)	lbs.	623,930	502,840
Acetic anhydride	lbs.	6,650	72,940
Amyl alcohol and fusel oil	lbs.	0	0
Carbon tetrachloride	lbs.	586,1[illegible]3	233,600
Chloroacetic acid (mono and tri)	lbs.	468,053	877,090
Formic acid	lbs.	278,132	136,682
Glycerine, crude	lbs.	831,312	533,283
Lactic acid (55 percent or more by weight)	lbs.	8,250	16,181
Perchloroethylene	lbs.	1,955,462	2,097,526
Trichloroethylene	lbs.	6,158,258	3,955,229
Vinyl acetate, unpolymerized	lbs.	3,011,491	2,779,340

Aliphatic Organics

or approximately 73 percent of all US imports during 1959.

Perchloroethylene — Imports of perchloroethylene in June were 1,955,432 pounds, valued at $154,005, and dutied at $9,231. Shipping here were: Italy 886,119 pounds, valued at $62,827, dutied at $3,768; France 639,953 pounds, valued at $48,229, dutied at $2,888; Canada 414,860 pounds, valued at $41,738, dutied at $2,503; and Japan 17,500 pounds, valued at $1,211, dutied at $72.

For the first six months of the year, imports totaled 11,569,900 pounds. Monthly production of the solvent, which is mainly used in dry cleaning, has been averaging 17 million pounds.

Trichloroethylene — Imports of trichloroethylene reached the 1960-high in June when 8,158,258 pounds arrived here from Europe. This brought the six-month total to a whopping 32,020,469 pounds.

Suppliers of this material, which was valued at $562,218, and dutied, according to the Commerce department, at $42,147, were:

Italy 4,101,793 pounds, valued at $299,921, dutied at $22,490; United Kingdom 1,496,370 pounds, valued at $96,648, dutied at $7,243; West Germany 1,381,339 pounds, valued at $81,762, dutied at $6,130; France 590,752 pounds, valued at $44,491, dutied at $3,333; Sweden 390,000 pounds, valued at $25,410, dutied at $1,903; and The Netherlands 198,004 pounds, valued at $13,986, dutied at $1,048.

Vinyl Acetate—June imports of vinyl acetate monomer totaled 3,041,491 pounds. This material came from Canada (2,946,491 pounds, valued at $492,947, dutied at $67,578) and Japan (95,000 pounds, valued at $43,860, dutied at $3,925).

Although import figures would indicate a rather competitive domestic market, such is not actually the case. The Canadian shipments reportedly come from an affiliate there of a US firm and this is not truly foreign competition.

Imports of vinyl acetate polymer in June amounted to 55,966 pounds, and, according to statistics issued last week by the Census bureau, this material was valued at $33,987 and dutied at $2,819. Suppliers were: Japan 30,864 pounds, valued at $19,480, dutied at $1,602; West Germany 20,000 pounds, valued at $10,728, dutied at $919; Canada 4,000 pounds, valued at $3,600, dutied at $274; and Switzerland 1,102 pounds, valued at $179, dutied at $24.

OPD Reports From Europe

Penicillin Ready to Combat Staph

—*Continued from page 5*

tial royalties" in due course. In a recent statement about the company's business, the new penicillin drugs took precedence over the company's "Brylcreem" hair dressing, which Beecham claims is now the largest selling such product in the US. Beecham will launch another toilet goods product in the US shortly, the company says.

The synthetic penicillin drugs are based on the discovery that an almost unlimited variety of penicillin compounds can be produced by taking the molecule 6-aminopenicillanic acid, the core of the drug, from regular fermentation vats and then adding side-chains to the molecule to produce different drugs.

The core acid itself is not a satisfactory antibiotic. Research work similar to that of the Beecham group has been done by scientists at Massachusetts Institute of Technology.

The new penicillin to combat resistant staphylococcus germs is now undergoing clinical trials and some doctors have reported it is proving successful. Widespread use of earlier penicillin drugs killed off many of the sensitive strains of staphylococci leaving behind resistant strains which produce penicillinase, a substance which destroys ordinary penicillin.

Hospitals, in particular, have been troubled by these resistant germs and at times some units in hospitals have been closed due to epidemics of resistant staph infections.

Beecham reports its directors have committed $4.2 million for capital expenditures in antibiotic development. The company recently signed an agreement with the Wright-Fleming Institute of Microbiology to package and distribute the vaccines and other biological preparations produced at the institute. This institute is one of the leading biological research centers in Britain.

Successful launching of new penicillins as a British drug development would give the whole UK pharmaceutical industry a fillip. Competition has pushed prices down on most standard antibiotic and hormone drugs, and profit margins have not been sizable on most products. Spending only about $14 million a year on research, the British industry has been handicapped in discovery of new drugs.

The 'Rationalization' Cure

One partial cure of this problem has been a trend to "rationalization" of the industry into fewer companies. In recent months Glaxo Laboratories has taken over Allen & Hanburys, Burroughs Wellcome has acquired Cooper MacDougall and Aspro-Nicholas has merged with Griffiths Hughes. Most industry observers think the economics of a modern drug industry will force acceleration of this trend.

A pricing handicap of the UK industry has been a formula agreed on with the National Health Service, practically the only customer for ethical drugs in Britain. The pricing scheme went into operation in June of 1957 for a trial period of three years.

Both sides had many suggestions for changes as the trial period came to an end, but negotiations on a new formula satisfactory to both were not completed in time to inaugurate a new scheme in June. The old formula therefore has been extended to December 16.

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Coal Chemicals

Coal chemicals men continued to report a seasonally slow market last week. Observers feel that the July-August vacation period is a particularly difficult time to try and estimate exactly what busines is doing. Most sources, however, remain optimistic as to prospects for the fourth quarter, providing there is a fair upturn in steel operating rate and new model cars find acceptance with the public. Pricewise, the market was unchanged from last report. Some producers recorded a 5 cent per pound across the board advance in a-picoline at the first of the month.

A petrochemical producer recently came on stream with an o-xylene unit at Corpus Christi, Tex. The company reports that it took barely five months from the signing of contracts to completion and operation of the unit, which has been estimated to have a capacity of 70 million pounds annually. Current industry plans call for nearly 400 million pounds of o-xylene capacity to be in place by the end of next year. Much of the material will go for export use, but domestic producers have been called upon to use increasing amounts of o-xylene for phthalic anhydride production.

Trade sources report no noticeable consumer resistance to the price increases on naphthalene derivatives which went into effect on July 1. The advances are merely a reflection of the shortage of naphthalene which has been in evidence for more than a year. Sources hold out little hope for an easing in the naphthalene market for the balance of this year and projections for '61 are not overly optimistic.

The American Iron and Steel Institute estimated that steel production in the week ended August 14 would amount to 54.6 percent of theoretical capacity equivalent to 1,556,000 net tons of steel. Output of steel in the previous week was 1,537,000 tons, 1,476,000 in the comparable week one month ago and 335,000 net tons in the corresponding week one year ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 14, 1959
118.28	118.28	118.40	118.45

For Current Prices see Page 10

Basic Products

Benzene — June report of the Census Bureau indicated imports of benzene for the month amounted to 9,730,801 gallons valued at $2,455,251.

Imported at Galveston from France during the month was 1,754,377 gallons valued at $503,498. Also in at Galveston from Russia: 4,880,580 gallons with a value of $1,189,156. Imported at Detroit from Russia was 3,095,844 gallons with a value of $762,597.

Possibility of another price increase on benzene has been rumored for some time. Sources feel that a good increase in steel operating rate and subsequent rise in the amount of cokeoven benzene available would serve to stave off an advance and loosen the market by the end of the year.

Since some producers have thirty-day contracts on benzene, September 1 appears to be a key date to watch, from a price standpoint, sources report.

Naphthalene — According to Census Bureau report, imports of crude naphthalene during the month of June were as follows:

Country	*Quantity (lbs.)*	*Value ($)*
Canada	1,127,900	$64,058
United Kingdom	871,720	47,157
Belgium	826,725	94,329
Union of So. Africa	407,410	41,046
Netherlands	223,767	8,114
Poland	192,903	8,577
Total	3,650,425	$263,281

An increase in steel operating rate will improve the supply situation, but not immediately since it will take a few weeks for consumers to receive additional tar and process it for naphthalene.

Phenol—Prices are unchanged from previous report. Sources indicate that sales have continued to gain.

Demand in the electronics field has been steady and sources look for a continuation of the strong growth evident in this market outlet in recent years.

a-Picoline—Listings were unchanged from last report. Most producers reported a 5c. per pound across the board advance in the price of a-picoline, effective August 1. Tankcar price is 43c. a pound, while carload of drums is 46c. and less carload drum lots are 46½c. a pound. Prices are on a freight allowed basis.

Tar Acids—Natural tar acids have recovered somewhat from the slump that followed the market for the first six months of the year. Sources point out that it is difficult to tell exactly what the business climate is like during the July-August vacation period. Most sources agree, however, that there has been some upturn in movement of cresols, cresylic acid and natural phenols. Prices of long standing are unchanged from previous report.

Toluene—Tankcar supplies are readily available, sources report. However, a brisk export demand and sizable amounts of toluene being blended into aviation gasoline has led to a snug market for large quantities in the Gulf area.

Census Bureau reported exports of toluene in the month of June amounted to 7.5 million gallons as against 5.9 million in the previous month. Exports in the first half of the year totaled 27.6 million gallons, a 5.7 million hike over the 21.9 million gallons exported in the first six-months period last year.

Xylene—A petrochemical producer recently went on stream with an o-xylene unit at Corpus Christi, Tex. Capacity of the plant has been estimated at 70 million pounds annually. The company points out that it took barely five months from the signing of contracts to completion and operation of the unit.

Petrochemical interest has continued to center on o-xylene. It is estimated that nearly 400 million pounds of capacity will be in place by the end of '61.

Intermediates

Dodecylbenzene — Price remains unchanged at 11c. per pound in tankcars, 13.4c. in carload of drums and 14.4c. per pound in less carload drum lots.

Market is reported currently rather static. July and August are expected to show the usual seasonal slump in sales with a pickup expected for September.

Sources point out that wide fluctuation in monthly production figures, as reported by the Tariff Commission, may be due

Cokeoven Output: June

The following statistics indicate production of selected coal chemicals as reported to the Bureau of Mines by cokeoven plant operators. Benzene statistics do not include motor benzol. All figures are reported in gallons.

	June 1960	*June 1959*	*First Five Months 1960*	*First Five Months 1959*
Benzene, nitration	8,165,945	9,610,600	61,755,497	58,596,600
Industrial pure	2,699,003	3,430,800	21,106,852	21,674,400
Industrial 90 and other	148,013	145,100	1,098,357	836,500
Coaltar, crude	56,561,707	71,467,300	411,290,974	431,040,000
Chemical oil, crude	2,600,421	2,271,800	16,526,500	13,508,700
Solvent naphtha, crude and refined	434,397	588,400	2,789,602	2,859,800
Toluene, nitration	2,046,535	2,683,900	14,262,422	14,430,300
Industrial pure	479,691	519,700	3,206,376	3,700,800
Xylene, all grades	677,387	798,900	4,396,482	5,003,400

Coal Chemicals

simply to intensive efforts on the part of consumers to reduce inventories. Production in the first five months of the year was 195.5 million pounds, approximately 33 million pounds less than the 228.4 million pounds turned out in the five-months period last year.

Phthalic Anhydride — Production rates vary with the amount of naphthalene being made available. A low steel operating rate has cut down on cokeoven output and most sources report they are operating virtually on a day to day basis as far as raw material is concerned. As one observer put it, "a delay of a few days in naphthalene shipments can knock down phthalic production by 10 to 15 percent."

Last price change in this market was the 2c. per pound across the board advance made by some producers on July 1. Other makers reported increases of 2c. per pound on April 1. Price of flake material, bags, carload, is 19c. per pound with freight equalized.

Styrene Monomer—Although the price of technical grade monomer advanced about 1½c. per pound across the board on July 1, trade observers report little consumer resistance to the increases. The advance partially reflects the January 1 advance on benzene of 4c. per gallon.

Production of styrene monomer in the first five months of the year amounted to 735.2 million pounds, an increase of 115.4 million over the 619.8 million pounds turned out in the five months period last year.

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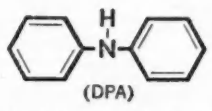

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Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended August 14, were as follows:

Ammonia liquor	lbs.	492,323
Ammonium sulfate	lbs.	20,704,956
Benzene	gals.	1,996,647
Coaltar	gals.	10,913,180
Crude chemical oil	gals.	319,098
Solvent naphtha	gals.	63,819
Toluene	gals.	446,738
Xylene	gals.	127,639

Heyden Chemical Raises Salicylaldehyde Standard

A new specification for salicylaldehyde, setting exact quality levels for appearance, assay, congealing point and chlorine content, has been established by the Heyden Chemical Division of Heyden Newport Chemical Corporation.

For appearance, the new specification differs in that it sets a definite color of "100 APHA maximum." The congealing point is raised from 1 degree centigrade minimum to 1.4 degrees, while the specified chlorine content is reduced from a maximum of .2 percent to one of .1 percent.

A major departure is the introduction of a minimum assay of 98.5 percent. This reportedly makes Heyden's salicylaldehyde unique as the only commercial grade available with guaranteed assay.

Pesticides Have Big Job

—Continued from page 4

these greens out of the market, the department maintains.

● Corn earworm caused an annual loss of more than $4 million to sweet corn during 1942-1951.

● Sweet potato weevils inflicted losses of about $3 million in Louisiana in 1946. Through the use of insecticides, these losses were cut to $340,000 by 1951.

● DDT has been the making of the sweet corn industry in the south. It's a $10 million crop in Florida alone.

● Losses due to onion thrips have been reduced by more than half since 1946, when DDT came into use.

● Hand weeding celery now costs up to $59 an acre, but newly-developed herbicides promise to save 80 to 90 percent of this expense.

● Mexican bean beetle takes a toll of $3.5 million a year from lima bean growers.

Insecticide Milestone

—Continued from page 3

petition for clearance of the chemical after the March 6 final deadline date.

Arsenic acid is used in cotton production, chiefly in Texas, as a defoliant. It has never been recommended for such use by either the Department of Agriculture or the Texas Agricultural Department, but its use has been growing among the cotton farmers and is said today to represent a substantial business to suppliers of the compound.

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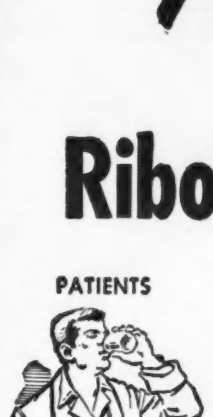
PATIENTS 	Better taste in oral preparations, and practically no bitter taste.	Less pain on injection of parenterals because of the presence of fewer solids.				
PHYSICIANS	Pleased patients please physicians.	Better taste in orals. Fewer "bitter-taste" complaints from patients.	Smaller dose volume with higher potency solutions.	Less pain with parenterals. Greater patient acceptability.	Fewer complaints from patients. Less wasted time for doctors.	
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SALES & ADVERTISING DEPARTMENTS	Better taste; more palatable in high concentrations.	Less pain on injection. Pleased patients ease the doctor's day.	Smaller dose volume required with higher potency solutions.	Pleased physicians are better prospects for other ethical preparations in your line.	*Need a sample and technical data sheet? We'll gladly send both. They're free.*	
MANAGEMENT	New, all-time low price for Riboflavin-5′-Phosphate Sodium 'Roche'.	Economy; lower manufacturing cost raises profit margins.	No solubilizer needed, thus saving extra cost.	Improves present products, makes them easier to sell.	Better your product and you will sell more of it.	Lower inventory costs; less materials required for higher solubility.

TECHNICAL NOTES The theoretical B_2 content of riboflavin-5′-phosphate sodium is 73%. The Roche product has 70–73%.

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Drugs, Fine Chemicals

Bulk aspirin is a bright spot in an otherwise merely routinely busy drug and fine chemicals market. In fact, withdrawals against existing contracts on the part of certain leading tableters of the popular pain-killing agent (1958 sales at the manufacurers' level: $8.8 million) have been especially heavy for the past several weeks. Spokesman for a major bulk producer attributed this early buying spree to inventory building prior to an expected fall pick-up in retail sales. He noted additionally that, while aspirin tableters traditionally waited until September to call for deliveries, the situation in 1959 was similar to today's, indicating, perhaps, that a new buying pattern has been established.

Not all tableters are taking deliveries, of course. One firm, reportedly, has closed down its facilities for vacation and while firms which include aspirin in cold preparations and such like have placed orders already, they aren't likely to make large withdrawals until there's a chill in the air.

Import statistics for June, released last week by the Census bureau, tell no startling stories. True, imports of ascorbic acid rose appreciably above the May level, but at 34,189 pounds, the total shipment represented no more than an average monthly load. Pyridoxine imports were notably low at 332 pounds, although no material had been brought in the previous month, and thiamine shipments dropped appreciably.

Inshipments of natural menthol were also down in June. This could explain the rise in synthetic menthol imports to 26,064 pounds, the 1960 high.

Ascorbic Acid—Imports of ascorbic acid rose from an unusually low level in May (7,936 pounds) to 34,189 pounds in June, an average monthly shipment. Valued at $121,804 and dutied at $12,782, this material came from: Japan 15,874 pounds, valued at $54,695; Denmark 8,397 pounds, valued at $22,124; Australia 6,611 pounds, valued at $33,819; France 2,205 pounds, valued at $7,090; and West Germany 1,102 pounds, valued at $4,076.

The same month, thiamine imports were 4,433 pounds, valued at $19,410 and dutied at $2,036. Shipping here were Japan (3,000 pounds, valued at $8,100 and dutied at $850), and Denmark (1,433 pounds, valued at $11,310, dutied at $1,186).

June imports of pyridoxine, totaling 332 pounds, came from West Germany (200 pounds, valued at $232, and dutied at $24) and Japan (132 pounds, valued at $5,172, and dutied at $543).

Bacteriostats—This is one area of the fine chemicals market that is growing progressively bigger. New uses are constantly being developed and, according to trade reports, several new consumer products containing bacteriostats are in the process of being test-marketed around the country.

Cosmetics manufacturers are reportedly very interested in this relatively new class of chemicals. Among others, Helena Rubinstein is supposedly working on what is probably a skin preparation containing one of the more recently developed bacteriostats.

Gelatin—Gelatin production in June dropped some 700,000 pounds below the May level, and, as shipments remained at approximately the same volume, the net result was a slight decline in stocks, from 11,213,000 pounds at the end of May to 11,001,000 on June 30.

Production of gelatin in June, according to statistics just released by the Census bureau, was 4,798,000 pounds, compared with 5,503,000 in May and 4,907,000 in June 1959. Of the total, 4,069,000 pounds were manufactured from hides while the remainder (729,000 pounds) was ossein-derived.

By type, output was, in thousands of pounds: edible 3,222; technical 304; pharmaceutical 440; and photographic 832.

Shipments of gelatin in June totaled 5,010,000 pounds, against 5,104,000 in May and 5,921,000 in June 1959. Classified by type, shipments were in thousands of pounds: edible 3,447; technical 273; pharmaceutical 406; photographic 884.

Stocks at June's end measured 11,001,000 pounds, comprising (in thousands of pounds): edible 5,252; technical 916; pharmaceutical 1,004; photographic 3,829.

Menthol—June imports of natural menthol totaled 72,948 pounds, and were valued at $421,794 and dutied at $25,502. Shipping here that month were: Brazil 59,227 pounds, valued at $335,064; Australia 5,516 pounds, valued at $20,772; Japan 4,500 pounds, valued at $44,050; Argentina 21,205 pounds, valued at $13,228; and Taiwan 1,500 pounds, valued at $8,738.

Synthetic menthol imports, totaling 26,064 pounds and valued at $126,531 and dutied at $9,115, arrived here from: France 23,309 pounds at $113,093; Spain 2,205 pounds at $12,442; and West Germany 330 pounds at $1,016.

Quinine—General Services Administration has made the inevitable announcement: it will reoffer its quinine stockpile six months from now on an unrestricted basis by sealed bid.

Up for sale are 13.9 million ounces of quinine. Approximately 69 percent of this is in the form of sulfate powder, 20 percent in pills and dosage forms, and 11 percent in hydrochloride powder.

In a switch-play, GSA will offer the dosage forms and hydrochloride powder as separate items soon after the expiration of the six-month waiting period. Then, four to six months after that sale is consummated, the agency will offer the sulfate powder in its entirety. The lucky buyer will be required to withdraw approximately 1.9 million ounces during the first twelve-month period following the award and a quantity not to exceed that amount during each subsequent period.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 14, 1959
59.93	59.93	59.93	60.49

For Current Prices see Page 10

Botanicals

Activity in the botanicals market is seasonally slow, ruling out substantial price movements in either direction. Indications of a late summer pick-up are seen, however.

Agar—Prices remain high at $2.65 to $2.75 for USP Kobe No. 1 strip and $2.40

Drugs and Fine Chemical Imports: June

Imports of selected drugs and fine chemicals for the months of May and June, 1960, as reported by the Bureau of Census, were as follows:

		June	May
Ascorbic acid	lbs.	34,189	7,936
Caffeine	lbs.	90,110	114,542
Camphor, crude	lbs.	0	0
Refined	lbs.	8,000	16,240
Synthetic	lbs.	121,000	134,700
Iodine, crude	lbs.	176,751	137,391
Menthol:			
Natural	lbs.	72,948	85,258
Synthetic	lbs.	26,064	8,178
Pyridoxine	lbs.	332	0
Quinidine and salts	ozs.	122,113	51,815
Quinine sulfate	ozs.	0	0
Saccharin	lbs.	15,018	37,717
Sodium alginate	lbs.	25,000	15,940
Tartaric acid	lbs.	259,092	232,831
Thiamine	lbs.	4,433	7,473
Theobromine	lbs.	7,200	11,322
Vitamins and vitasterols, n.e.c.	lbs.	71,790	26,427

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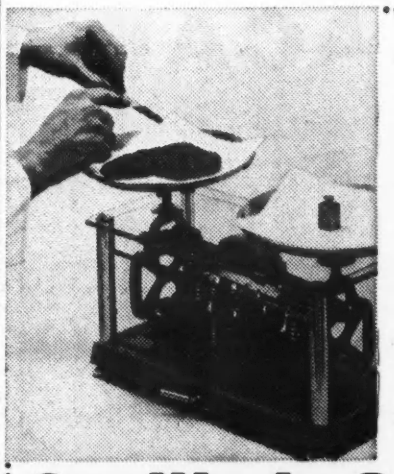

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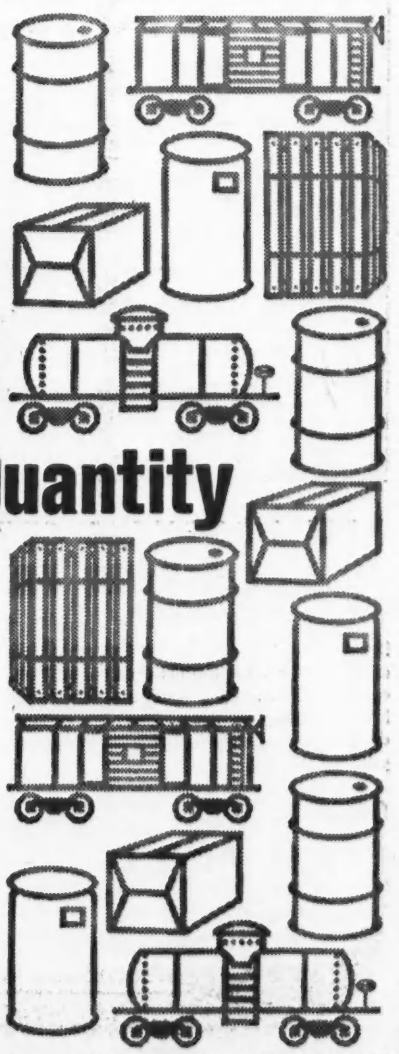

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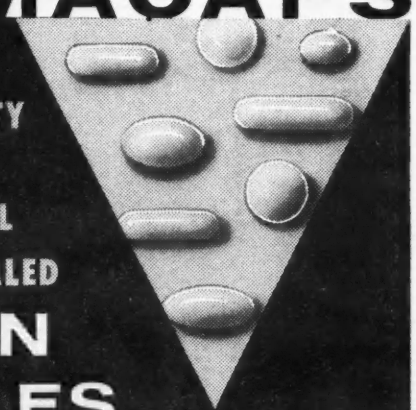

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Drugs, Fine Chemicals

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Arnica Flowers—Demand is no better than routine; supplies adequate. Quote is 75c. a pound.

Bloodroot—Recent arrival of new crop bloodroot, which is obtained from domestic sources, precipitated a slight price reduction, to 75c. to 80c. a pound, the current level. Modest interest is reported.

India's Five-Year Plan

—Continued from page 7

pany sees an annual foreign exchange saving equivalent to $10.5 million.

The latest information is that the Rourkela tonnage oxygen plant is now in operation. It is the second three air-separation units designed to supply low-cost oxygen for manufacturing purposes.

The new unit will increase production to 200 tons per day and also provide pure nitrogen for a fertilizer plant under construction nearby, in addition to supplying liquid gas for blasting purposes in ore mines.

An oxygen plant, operating at 50 tons oxygen capacity per day (99.5 percent purity) with eventual daily capacity estimated at 300 tons, has gone into operation at the Durgapur Steel Works, the report also notes.

Bank Sees the Future

—Continued from page 7

development played in the industry's growth? What is the pattern for the future?

Growth, as Chase Manhattan sees it, has come from:

- Displacement of older products, for example man-made fibers in place of natural materials, synthetic for natural rubber, and detergents for soaps.
- Creation of new and enlarged markets through the provision of new, substantially better and lower-priced products. Outstanding examples are pesticides, drugs, plastics and high-concentration fertilizers.

Research and development, particularly basic research, has been the foundation of growth in the chemical field, according to the bank publication.

The industry's R&D outlay is currently estimated at some $77 million a year, or twice the level of 1953, and behind only the aircraft, electrical equipment and machinery industries. And in basic research, the chemical makers are second to none.

The bank estimates that over half of chemical products now available were not commercially produced, and many not even known, in 1939.

Monsanto Consolidation Sees Robson Shifting to St. Louis

Ernest S. Robson, a director of sales operations for Monsanto Chemical Company's organic chemicals division, will transfer to headquarters in St. Louis, Mo., on September 1 in a move to consolidate the sales management function at division headquarters.

Mr. Robson has responsibility for supervision of the organic division's district sales offices at New York; Everett, Mass.; Syracuse, N.Y.; Pittsburgh, Pa.; Wilmington, Del., and Atlanta, Ga.

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Drug Men Claim They Know What FDA Needs

—Continued from page 3

their views to the full law section on September 29. Its views then will go before the directors at the October meeting.

There is a strong feeling in the industry that the new regulations proposed for new drugs by FDA (OPD, 7/25/60) make a good part of the provisions of the Kefauver and Hill bills moot. By using the authority it already has, FDA through its new regulations would make some of the provisions unnecessary.

For example, while the Hill bill would expand the factory inspection powers of FDA, the proposed regulations shows FDA already moving in this direction without the need of new authority.

There is this difference, it is conceded—although it is argued that the difference is gradually disappearing: the expanded factory inspection authority in the Hill bill covers all drug manufacture—old drugs as well as new—while FDA's new regulations are limited to new drugs.

This difference is of diminishing importance, it is claimed, because the vast majority of the drugs in use today are those developed since the food, drug and cosmetic act was enacted in 1938 and are marketed under the new drug section of that law. This area is enlarging all the time while the use of old drugs diminishes.

And the authority of FDA under the new drug section of the law is so broad that it can have access to almost any of the reports contemplated by the Kefauver-Flemming bills, it is added.

Regarding the matter of licensing, which is the feature of the Kefauver bill, the FDA regulations amount to virtually the same thing as licensing. A new drug cannot be put on the market until it has an effective new drug application in force; thus it is largely a matter of semantics whether it is called licensing or not.

But the feature of the Kefauver bill that disturbs the drug manufacturers is the type of licensing called for. The Kefauver bill is a product-licensing bill rather than a licensing of manufacturers.

A Difference in Terminology

This is shown by the fact that the Kefauver bill speaks of propagating—a term applicable only in production of biologics and not in the manufacture of synthetic drugs.

Industry people don't think it is necessary for a licensing scheme for the ethical drug manufacturers to go this far.

It is reported that there are some elements in the drug manufacturing industry who would not oppose a licensing system applicable to companies, but they would strongly object to any system of product licensing similar to that applicable to viruses, vaccines, and the like.

One feature of the Kefauver bill not contained in the Hill bill is that which extends the antibiotic certification system to all antibiotics. It is presently limited only to the first five developed. Industry's position on this is not yet clear. At one time some elements favored certification and others opposed it. This question is now being reviewed by industry.

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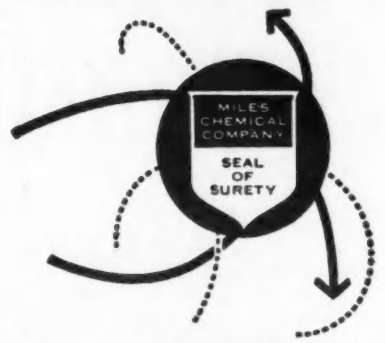

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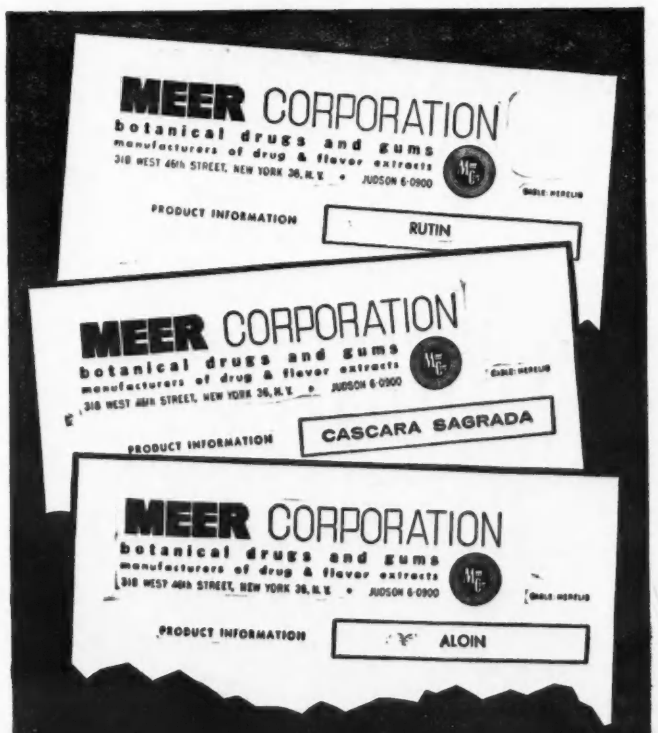
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Essential Oils, Aromatics

The only actual price change on spot is a 50 cent per pound advance in the price of domestic dillweed. Other items, however, created interest. Spearmint continued to weaken, which was expected because the current crop is reported to be quite large. Peppermint, on the other hand, is firming. It is said that the crop is quite a bit smaller than was expected and that the growers are holding on to their material until the price gets up to a level of their liking. Formosa citronella on spot has not yet reflected any affects of the typhoons that have hit the island since the beginning of the month, but it is likely that the market will show a little firmness. Few if any offerings are said to be made at source at the present time. Lemongrass is reported to be rather weak.

The following list of 27 synthetic flavorings has been proposed to be recognized as safe for their intended use by the Food & Drug Administration.

They are acetaldehyde, acetoin, aconitic acid, anethole, benzaldehyde, brominated vegetable oils, n-butyric acid, cinnamaldehyde, d-or-l-carvone, citral, decanal, diacetyl, ethyl acetate, ethyl butyrate, 3-methyl-3-phenyl glycedic acid ethyl ester, ethyl vanillin, eugenol geraniol, geranyl acetate, glycerol, limonene, linalool, linalyl acetate, l-malic acid, methyl anthranilate, piperonal and vanillin.

Persons interested in commenting on the list have 30 days in which to make their remarks.

From government sources, we have the following information:

- Norway may become a market for imports of fruit juices, as a result of certain tariff reductions. The trade feels that such products as prune juice, as well as pineapple, peach, and apricot and mixtures thereof may be among the juices to be imported.
- United Kingdom imports increased more in 1959 than in any year since 1953, although the figures remain considerably below those prevailing before 1939. A significant feature of the increase was the greater proportion used for manufacturing purposes, such as squashes and other processed drinks. Frozen orange juice concentrate was introduced on a large scale for the first time.

According to the Foreign Commerce Weekly, which is published by the United States Department of Commerce, bids are invited from United States firms until August 31 for construction of a plant for the preparation of fruit juices, essential oils, and foodstuffs by Superior Gobierno de la Provincia de Entre Rios, Casa de Gobierno, Parana, Entre Rios, Argentina.

The new plant, to be located close to the city of Concordia near the Uruguay River, is to have daily capacity to process about 500 tons of fruit.

Interested firms may write the government authority for further information.

It is expected that plans and specifications may be available on loan shortly from the Trade Development Division, Bureau of Foreign Commerce United States Department of Commerce, Washington 25, D.C.

Price Trends

Advanced
Dillweed, 50c. per lb.

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last	Prev.	Last	Aug. 14,
145.97	145.90	146.10	147.46
week	week	month	1959

For Current Prices see Page 10

Essential Oils

Citronella—Communications from Formosa have brought us the following information:

- There was another typhoon last week adding to the damage that resulted from the typhoon on August 1.
- The first typhoon crossed the island, doing particular damage to the citronella plantings. The crop was damaged by the rains and high winds, but the ensuing floods were even more destructive.
- Some distilleries have been destroyed.
- Farmers who grow citronella are busy repairing damaged areas and are neglecting their citronella plantings for the time being.

In spite of these reports, there is a good deal of uncertainty as to the actual damage that has been done to the plantings. Because people on Formosa are not yet sure how extensive their losses are, they are reluctant to offer material at the present time.

On spot, this is not disasterous because, it is reported, supplies are plentiful.

The price remains at its previous level.

Dillweed—The spot market is said to be firming.

Reports are conflicting, however, as to the availability of dillweed.

The previously-listed price was $3.25 per pound and the lowest price that could be found around New York last week was $3.75 per pound. Dealers who quoted $3.75 per pound said this was for old crop material and that they didn't have any new stuff available.

Other dealers quoted prices ranging between $4.10 and $4.25 per pound, which they say is for new crop material.

From published sources, we find that harvesting of the domestic material usually takes place in the early fall. Principal growing areas are in Ohio, Idaho and Oregon.

Experts agree that weather conditions are greatly responsible for yield of oil. Very hot sunshine has a tendency to burn the plants and thereby reduce the quality and quantity of oil.

The crop should be cut when the most advanced seed is turning brown. Material is cut, allowed to dry for a short time in the fields, then hauled to the distillery.

Drying for too long a time results in considerable loss of oil by evaporation—especially of the more volatile terpenes.

For this reason, the oil distilled from dried herb would be relatively high in carvone, a characteristic undesirable in herb oils.

Although dillweed was first planted in North America many years ago, it was not grown commercially until 1930.

Now the United States relies almost completely on its domestic production and is in no way dependent on its former European suppliers.

Peppermint—Reports of a short crop have firmed the spot market. Some dealers have raised their prices considerably, but the OPD range continues at its previous level.

Knowing the crop is smaller than usual, the farmers are said to be reluctant to sell their material at prices they consider too low. They are holding on to their peppermint until the prices rise, it is said.

The following information about the actual production of peppermint oil might interest peppermint users.

Some mint is cut from the middle of July to the middle of August and some of it is cut in the latter part of August and early September.

After the material is cut, it is usually left in the fields at least 48 hours to dry. Then it is taken to the distilleries and dumped into the vats which are usually from 6 to 11 feet deep and 6 to 9 feet wide across the top.

Steam is turned on to moisten the material, then the lid is clamped on.

Distillation requires approximately an hour—the wetter the mint is, the longer the distillation process takes.

When this is completed, the oil is collected in cans or drums.

Spearmint—Most dealers are quoting prices of around $8 per pound. One company, however, reported that their new crop material will be available at $4.50 per pound.

Material is said to be plentiful at source.

Seeds and Spices

Pepper—Spot prices firmed during the week. The advances are as follows:

Malabar black advanced in price 1c. per pound—from 57c. per pound to 58c. per pound; Lampong black advanced in price 1c. per pound—from 57c. per pound to 58c. per pound; and Muntok white advanced 4c. per pound—from 78c. per pound to 82c. per pound.

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LEADERS IN AROMATIC CHEMICAL RESEARCH

Lemon Oil Marketing Outlook Gloomy

OPD 'Depth' Report on Lemon Oil

—Continued from page 9

foreign competition. During the early 1950's, however, this was a factor to be reckoned with.

About ten years ago, when oil from Italy was almost $2 per pound cheaper than material from California, almost 300,000 pounds were imported.

In 1959, according to the Bureau of Census, only 81,000 pounds of terpene-containing material was brought in from Italy. The unit value was roughly $4 a pound.

Domestic producers say, however, that they never expect to squeeze out Italian competition. The Messina oil has a characteristic flavor that some soft drink and candy manufacturers like and will buy it even if it costs ten times more than the domestic material.

In some products the cost of the flavoring agent in such a small percentage of the cost of the whole product, that costs are not taken into consideration where flavoring is concerned.

The same type of situation exists in the competitive battle with the synthetics. While a good many manufacturers who use synthetic lemon oil do so because of the economy, many of them have other reasons.

Certain products actually taste better if they are flavored with synthetic lemon oil. In some cases the synthetic flavoring is more soluble, has greater heat resistance and is more stable. And where these properties are desirable, the manufacturer will continue to use the synthetic material.

Primarily because some synthetic material will always be sold, the majority of natural lemon oil producers are convinced that they will not cut the price of the natural oil.

There is no reason to reduce the price further, they say. There is nothing to gain by it. It is generally held that current prices will remain in effect for two or three years while the surplus is being used up. Then the price level will probably move up gradually.

Lemon Oil Study Available Shortly

OPD's special "in-depth" report on lemon oil is being reprinted and will be available shortly. These nineteen previous studies are also still in print:

"METHANOL'S GROWING PAINS: Overseas Expansions Cloud the Future."
"IRON OXIDES' RESURGENCE: Pigments and Ferrites Enjoy High Demand."
"SOYBEANS FACE CHALLENGE: Red China Might Snatch Up Exports."
"ENZYME FORECAST FOR 1965: $60 Million Demand Seen in Five Years."
"BROMINE GROWTH IS PROMISING: But Ethylene Dibromide Is Baffling."
"BHC FIGHTS MANY FOES: Market Woes, Weevils Conspire."
"METHYLAMINES MARKET POSERS: DuPont's Moves Hold the Answers."
"PHTHALIC ANHYDRIDE'S STORY: Naphthalene Holds the Key to Growth."
"OPTICAL BRIGHTENERS: Why There May Be Gold in Paper."
"ACETONE'S OUTPUT RISE: Calm Surface, Troubled Depths."
"MALEIC ANHYDRIDE EXPANSION: Is Industry Capacity Going Amok?"
"LYSINE MONOHYDROCHLORIDE: Sales to Multiply 25 Times in Three Years."
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"DOP, DIOP VOLUME RISES: But the Profit Squeeze Continues."
"BUTADIENE CONVALESCES: Industry Recovers from Poor '58."
"STYRENE MONOMER'S STORY: The Industry's Three Big Questions."
"CHELATING AGENTS: A Phenomenon Has Growing Pains."
"TITANIUM PIGMENT: Why Producers Scoff at Recession."

Reprints of the twenty articles may be obtained at 35 cents a copy (discounts on quantities of a hundred) from OIL, PAINT AND DRUG REPORTER'S Reprint Department, 30 Church Street, New York 7.

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Coatings Materials

Business in raw materials for protective coatings was essentially routine last week. Pigment prices remain stable, and business volume in red lead and litharge seems about on an even keel after the ½ cent price advance effected in the middle of July. Red lead for maintenance painting is fairly steady, but the effects of cutbacks in new "heavy steel" work are still being felt.

Late in the third quarter there is expected a pick-up in titanium dioxide for white and pastel appliance finishes, because by that time, better appliance production rates should be in operation. High inventories had resulted in a cut back in production some weeks ago.

The new 1961 model cars are just getting underway in production, and this is expected to soon step up to full production requiring a full flow of various types of automotive finishes. Accordingly, while the paint business is somewhat dull and not at the business volume that had been expected, certainly the latter part of the third quarter and all of the fourth quarter look good.

Business in the pure iron oxides is good, particularly is there a well sustained demand for the magnetic types used in the electronic industry for magnetic tape, and also for the core of plastic seals on refrigerator doors. Rubber and paint are taking their fair share, but at something less than the desired volume.

Zinc Chromate output is due for a boost in usage because of its use in such things as epoxy metal primers for auto body dip coatings and the like.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(1100—1949 average)

Last week	Prev. week	Last month	Aug. 14, 1959
103.16	103.16	103.16	103.03

For Current Prices see Page 10

Prime Pigments

Litharge—There is little or no change in the litharge situation. Supplies are quite abundant, demand is steady at a somewhat lower business volume than had been expected for the third quarter, and prices are firm at the higher levels established in the middle of July.

Red Lead—Business continues at about the same pace as it did before the ½ cent per pound increase effected in the middle of July. Demand for red lead maintenance paints is well sustained, but consumption for prime coating new structural steel has been off over recent weeks. This is because of the drop in "heavy steel" demand and output. The new price structures established in mid July are expected to hold unchanged for the weeks immediately ahead.

Titanium Dioxide — Sales volume last week is described as good, and just about like it had been the previous week. The overall demand, however, remains somewhat under what had been forecast for the third quarter, but producers looked for an upturn beginning late in the third quarter and continuing for the balance of the year.

Curtailed output of durable hard goods, such as appliances and kitchen equipment had a telling effect in this quarter, as did also the drop in auto output for the 1961 model changeover. Resumption of full automotive output is expected by September and an added spurt from the appliance industry is expected as inventories gradually drop back to more normal levels.

The paper trade continues to take its full share of titanium dioxide, and there should be the seasonal Fall spurt in paint demand. Prices long in effect are expected to hold unchanged. From a cost standpoint, there could well be an upward price adjustment, but competitive factors are felt likely to preclude any such price adjustment at this time.

Inert Pigments

Talc—While the big volume paint usage of magnesium silicate is still primarily in the realm of the 99.5 percent through a 325 mesh screen, for use in outside paints as an inert pigment, the specialty 400 mesh and 625 mesh grades are coming along nicely with increasing end-use applications. Prices now in effect are expected to prevail for the balance of the quarter and beyond.

Natural Resins

As yet there has been no significant effects on the United States domestic market for copal gums coming from the Congo, of the political unrest prevailing in that new country. Some importers say that they have temporarily lost cable contact with some of their prime markets, but there appears to be enough material on hand to take care of immediate needs.

Demand has been off for natural resins from the levels which a few months ago it seemed reasonable to expect. This has helped stand off what otherwise might be threatened shortages. Most dealers at this point are optimistic, and feel that the political situation will quiet down and shipments will be restored before any real shortage develops.

Shellac—Trading was said to be quiet last week. Price patterns recently in effect are unchanged. Supplies are adequate to meet all calls.

Shellac as a finish seems to have captured a certain segment of the paint industry and to be holding on firmly to that segment regardless of competitive finishes that become available. This is probably due to the fact that shellac varnishes are fast drying, have excellent hardness, gloss, non-skidding properties, and good depth of film appearance.

There are a few drawbacks, of course, such as the darkening of shellac on long storage in a tin can because of certain corrosive effects. A recent inhibitor development is expected to overcome this difficulty. Another handicap of shellac varnishes which has been the object of much research, but which has not yet been properly solved, is the poor water resistance of the shellac film. It turns white and stays white. When shellac is modified to overcome its poor water resistance, it tends to lose its adhesion, which is one of its outstanding characteristics.

Miscellaneous Materials

Casein—The casein market could best be described as quiet last week. Trading did not run into anything more than routine volume. This tended to hold price levels just about in the area where that had been the previous week. At New York 30 mesh Argentine acid type material was priced in the range of 20 to 20¾ cents per pound, mostly around 20¼ cents. Polish was listed at 20 to 20½ cents.

Australian casein for immediate delivery ranged from 22½ to 23¾ cents per pound, with fourth quarter delivery material offered at 22 to 22½ cents per pound. An occasional small lot of French

—*Continued on page 67*

Coatings Shipments Output: June

	Factory Shipments Dollars		*Reported productions Gallons**	
	May	*June*	*May*	*June*
Trade sales	$105,700,000	$109,600,000	32,900,000	34,100,000
Industrial sales, total	68,000,000	72,200,000	28,400,000	30,300,000
Paint and varnish	50,800,000	54,300,000	21,100,000	22,700,000
Lacquer	17,200,000	17,900,000	7,300,000	7,600,000
Overall totals	173,700,000	181,800,000	61,300,000	64,400,000

Totals sales Jan.-June: $566,600,000.

* Estimated total production. About 2 percent of this total was imputed for companies that reported only dollar sales.

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Nutrients Are in Line to Get GRAS Clearance From FDA

—Continued from page 7

86-139 dealing with nematocides, plant regulators, defoliants and desiccants.

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Biotin, calcium citrate, calcium pyrophosphate, calcium glycerophosphate, choline chloride, chlorophyll (extracted from plants without change in chemical structure), cystine (L- and DL-forms), L-cysteine, ferrous gluconate (ferrous lactate) and histidine (L- and DL-forms, free and hydrochloride forms).

Isoleucine (a-amino-d-methylvaleric acid) L- and DL-forms, leucine (a-aminoisocaproic acid) L- and DL- forms, linoleic acid (prepared from edible fats and oils and free from chick edema factor), magnesium phosphate (di-, tribasic), magnesium sulfate, magnesium citrate, manganese hypophosphite, manganese chloride, manganese gluconate, manganese sulfate manganese glycerophosphate, manganese oxide, phenylalanine (L- and DL-forms), potassium glycerophosphate, proline (2-pyrrolidine carboxylic acid) L- and DL-forms and serine (b-hydroxyalanine) L- and DL-forms.

Threonine (L- and DL-forms), L-tryptophane (1-a-amino-3-indolepropionic acid) free and hydrochloride forms, tyrosine (L- and DL-forms), valine (a-aminoisovaleric acid L- and DL- forms, zinc sulfate, zinc gluconate, zinc chloride, zinc oxide and zinc stearate (prepared from stearic acid free from chickedema factor).

Listed below are direct food additives granted grace periods, together with their limits and specified uses or restrictions:

p-Aminobenzoic acid, 30 milligrams per day, dietary supplement.

Betaine hydrochloride, 100 milligrams per day, dietary supplement.

Citrus bioflavinoids (including hesperidin), 60 milligrams per day, dietary supplement.

Iron chlorophyllin, 2.5 milligrams per day, dietary supplement.

Liver-stomach concentrate (with intrinsic factor complex), 125 milligrams per day, dietary supplement.

DL-Methionine, 200 milligrams per day, dietary supplement.

Rutin, 50 milligrams per day, dietary supplement.

Titanium dioxide, 0.5 percent, as a pigment in capsules and tablets.

Menadione, 1 milligram per day, dietary supplement.

Menadione sodium bisulfite, 1 milligram menadione per day, dietary supplement.

Copper (from copper sulfate, copper chloride cupric oxide), 10 milligrams copper per day, dietary supplement.

Cobalt (from cobalt gluconate, cobalt sulfate, cobalt chloride, cobalt carbonate), 1.0 milligram cobalt per day, dietary supplement.

Iron (from ferrous fumarate), 115 milligrams iron per day, dietary supplement.

Iodine (from kelp, potassium iodide, potassium iodate), 0.7 milligram iodine per day, dietary supplement.

Nickel (from nickel sulfate), 1.0 milligram nickel day, dietary supplement.

Boron (from sodium borate, boric acid), 0.03 milligram boron per day, dietary supplement.

Fluorine (from sodium fluoride, potassium fluoride, calcium fluoride), 0.5 milligram fluorine per day, dietary supplement.

Molybdenum (from sodium molybdate, molybdenum trioxide, molybdenum sesquioxide, ammonium molybdate), 2.0 milligrams molybdenum per day, dietary supplement.

Listed below is another group of direct food additives granted time extensions, together with the limits prescribed by FDA and the uses or restrictions specified by the agency:

Acetone, 30 parts per million, as a residual solvent in manufacture of spice oleoresins.

Butoxy polyethylene polypropylene glycol, 2500-2600 molecular weight, 2 parts per million in extraction liquor, as a defoaming agent in manufacture of beet sugar.

Disodium calcium ethylenediamine tetraacetate dihydrate, 35 parts per million, as a sequestrant in carbonated beverages, 110 parts per million, as a sequestrant in nonstandardized dressings.

Disodium dihydrogen ethylenediamine tetraacetate dihydrate, 100 parts per million, dietary supplement, 200 parts per million, as a sequestrant in vinegar.

Disodium ethylenediamine tetraacetate, 200 parts per million, as a sequestrant in trace mineral-fortified animal feeds.

Eucellaria fastigiata, aqueous extract of, as a gum used in foods.

Hexane, 25 parts per million, as a residual solvent in manufacture of spice oleoresins.

Hydrocarbon oil (deodorized), kerosene aliphatic type, 30 parts per million in extraction liquor, as a defoaming agent in manufacture of beet sugar. Isopropanol, 50 parts per million, as a residual solvent in manufacture of spice oleoresins.

Methanol, 50 parts per million, as a residual solvent in manufacture of spice oleoresins.

Methylene chloride, 30 parts per million, as a residual solvent in manufacture of spice oleoresins.

N-Monomethylamide of 0.0-dimethyldithiophosphoryl-acetic acid, 1.0 part per million, as a residue in processed olives and olive oil.

Morpholine, 3 parts per million, as a constituent of coating on fruits and vegetables.

Polyethylene glycol 400 tallow diester, 3 parts per million in extraction liquor, as a defoaming agent in manufacture of beet sugar.

Polyethylene glycol 300 ester of cottonseed oil fatty acids, 500 parts per million, as a solubilizing agent in pickles.

Polyethylene glycol ester of mixed fatty acids from tall oil (abietic, oleic, linolenic), average molecular weight 1050, 2 parts per million in extraction liquor, as a defoaming agent in manufacture of beet sugar.

Polypropylene glycol, average molecular weight 2000, 2 parts per million in extraction liquor, as a defoaming agent in manufacture of beet sugar.

Sodium nitrate or a combination of sodium nitrate and sodium nitrite, 200 parts per million, as sodium nitrite, in smoked, cured fish as a preservative.

Sodium nitrate or a combination of sodium nitrate and sodium nitrite, in meat-curing salt under directions for use that will result in residues of not more than 200 parts per million, calculated as sodium nitrite, in home-cured meat.

Soybean and cottonseed fatty acids (palmitic, stearic, oleic, linoleic, linolenic, myristic), 25 parts per million, as a defoaming agent in manufacture of beet sugar.

Trichloroethylene, 30 parts per million, as a residual solvent in manufacture of spice oleoresins.

Listed below are indirect food additives granted grace periods, together with their limits and the use or restrictions specified by FDA:

Gum rosin, in cotton bagging for dry food packaging.

Nylon resin (polyhexamethylene adipamide), average molecular weight 18,000, in milk-processing equipment.

Nylon resin (polyhexamethylene sebacamide, average molecular weight 18,000), in milk-processing equipment.

Polyvinyl alcohol and polyvinyl alcohol with melamine formaldehyde resin, not to exceed 1.2 parts per million in milk, from use as binders in milk-filter discs.

Polyethylene glycol 200 dilaurate, as a constituent of defoaming agent used in manufacture of food-packaging materials.

Sodium alkyl (tertiary butyl; tertiary amyl; isopropyl and ethyl; hexyl, heptyl and octyl) benzene sulfonates, in coating and adhesives used in food packaging.

Sodium o-phenyl phenate, as a constituent of defoaming agent used in manufacture of food-packaging materials.

The following indirect food additives (substances migrating from adhesives used in food packaging) have been given time extensions:

N-Acetylethanolamine, aminomethylpropanol, ammonium borate, ammonium sulfamate, 2,5-di-tert-amylhydroquinone, antimony oxide, balata rubber, barium peroxide, p-benzyloxyphenol, bisphenol A (polybutylated) mixture, di-butoxy ethyl phthalate, butoxy polypropylene glycol, di-butyl-maleate, butyldecyphthalate, 4,4-thiobis-6-tert-butyl-m-cresol, 2,6-di-tert-butyl-4-methylphenol, butyloctyl phthalate, butylphthalyl butylglyconate, butyl rubber dispersion and butyl titanate (polymerized).

Calcium nitrate, chlorinated rubber (natural rubber containing approximately 67% chlorine), tri-d-chloroethyl phosphate, cresyldiphenyl phosphate, cyclohexanone and formaldehyde condensate, N-cyclohexyl-p-toluene sulfonamide, diethyleneglycol hydrogenated tallowate, monoester, dimethyl formamide, dionylphenol, diphenyl and terphenyl hydrogenated, ethylene dichloride, di-(2-ethylhexoate), di-2-ethylhexyl adipate, 2-ethylhexyldiphenylphosphate and ethyl-p-hydrobenzoate.

Ferric chloride, fish glue, formaldehyde-reacted starch, formaldehyde o- and p-toluene sulfonamide, furfural, furfuryl alcohol, glyceryl borate, modified (glycol bori-borate resin), glyceryl monohydroxy stearate, glyceryl monohydroxytallowate, hydroquinone monobenzyl ether, di-isodecyl adipate, di-isobutyl phthalate, di-isodecyl phthalate, 4,4-isopropylidenediphenol (polybutylated) mixture, Japan wax, lauryl pyridinium salt of 5-chloro-2-mercaptobenzothiazole and limed wood resin.

Magnesium oxide, manganese acetate, melamine-formaldehyde, methylethyl ketone and formaldehyde condensate, 1-methyl-2-hydroxy-4-isopropyl benzene, methyl salicylate, monochlorobenzene, myristochromic chloride, di-d-naphthyl-p-phenylenediamine, 2-nitropropane, nonyl phenolethylene oxide condensates (with 40 mols ethylene oxide), di-n-octyldecyl adipate, octyldecyl phthalate octylphenol and octyphenoxyethanols.

Paraffin wax (70% chlorinated), petroleum hydrocarbon resins manufactured by copdymerization of dienes and olefins from low boiling cracked petroleum stocks, phenyl-d-naphthylamine (free of d-naphthylamine), o-phenylphenol, d-pinene, polymerized, d-pinene, resin, pine oil, polyethylene glycol 400 stearate, polyethylene glycol 600 dioleate, polyethylene glycol 600 oleate, polymeric esters of polyhydric alcohols and polycarboxylic acids prepared from glycerin and phthalic anhydride and modified with vegetable oils (soybean, linseed, castor, coconut), benzoic acid, rosin, styrene, vinyl toluene, polyoxyethylated nonylphenol, polypropylene glycol 1200, polyvinyl ethylether, polyvinyl pyrrolidone, potassium permanganate, potassium sodium tartrate, potassium tripolyphosphate, propylene glycol monolaurate and quaternary ammonium chloride (hexadecyl, octadecyl, octadecenyl derivative).

Salicylic acid, sodium chlorite, sodium-a- naphthalene sulfate, sodium chromate, sodium heptodecyl sulfate, sodium hypochlorite, sodium mercaptobenzol, sodium pentachlorophenate, sodium polystyrene sulfonate, stearic acid, stearyl dimethyl-benzyl ammonium chloride, styrene-butadiene rubber, styrene with maleic anhydride copolymers, sulfated rice bran oil, sulfur, tall oil, tallow, sulfated, tetrahydro, furfuryl alcohol, o- and p-toluene sulfonamide, 1,1,1-trichloroethane, triethyleneglycol di-(2-ethyl) hexoate, triethylphosphate, triphenylphosphate, trisodium ethylenediaminetetraacetate monohydrate, zein, zinc acetate, zinc ammonium chloride, zinc chloride and zinc dibutyldithiocarbamate.

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Oils, Fats and Waxes

Feature of the oils and fats market last week was the continued strength of soybean oil which advanced ½ cent per pound due to active demand and limited supplies for prompt delivery coupled with lower cost of soybean meal and fairly bullish crop report. Other edible oils reflected this strength and were firmer. Peanut oil was scarcer and lifted ½ cent per pound. Cottonseed and corn oils were slightly higher. Improved trading in crude coconut oil stiffened shipments and quotations were raised fractionally for August-September. Copra also was firmer.

Sold up production of tallow and greases for prompt delivery kept the market in a steady position. Most interest was in the better grades. Moderate trading was reported for soapers and dealers account at unchanged prices. Export interest was inactive.

Consumers interest in industrial oils continued to lag. Linseed oil was steady at the recent advance of ½ cent, reflecting the firmness of flaxseed. Continued quietness in tung oil unsettled this market and quotations were shadable on firm bids. Brazilian castor oil was quiet with sellers holding at former levels because heavy rains in Brazil affected deliveries of beans to mills. Oiticica was quiet and maintained at unchanged quotations. Domestic inquiry for crude menhaden oil was improved, while exporters continued on the sidelines. Producers, however, continued to hold at unchanged current levels.

Further weakness developed in soybean meal because of slow demand and selling pressure of heavy supplies. Unrestricted delivery declined $2.50 and in some areas prices were off $4 per ton. Linseed meal was quiet and unchanged.

Price Trends

Advanced

Cocoa butter, 1c. per lb.
Coconut oil, crude, ⅛c. per lb.
Copra, $1.50 per ton.
Corn oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Cottonseed oil, crude, ⅛c. per lb.
Refd., ⅛c. per lb.
Grease, choice white, ¼c. per lb.
Olive oil, 5c. per gal.
Peanut oil, crude, ½c. per lb.
Refd., ½c. per lb.
Soybean oil, crude, ½c. per lb.
Refd., ½c. per lb.

Reduced

Soybean meal, $2.50 per ton.
Tung oil, ⅛c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Aug. 14, 1959
107.54	107.83	112.43	112.79

For Current Prices see Page 10

Vegetable Oils

Castor—Buying interest lagged, while deliveries against moved in good volume. No. 1 Brazilian oil was offered at 19c. per pound, tankcars, New York, prompt delivery, and shadable. Domestic grades were quiet and unchanged.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	....	2.558.000
Previous week	....	1.040.000
Corresponding week, 1959	127.500	4.008.000
Total this year	3.342.450	58.912.000
Corresponding period, 1959	15.700.450	61.108.000

Coconut—Improved demand strengthened this market. Crude was firmer and lifted to 13⅜c. per pound, tankcars, f.o.b. Pacific coast for August and September delivery with trading at that level. The New York market was steadier and unchanged at 15¼c., tankcars, f.o.b. for prompt and later delivery.

Corn — Market was firmer. Crude was bid at 11¾c. per pound, tankcars, f.o.b. mills, prompt delivery. Refined oil also was higher at 15.48c., tankcars, New York basis.

Cottonseed—Futures were stronger last week scoring moderate gains with advance of soybean oil and allied markets. Trading was active and all positions higher with May and July deliveries reaching new highs. Trade interests continued to absorb September and selling March and May. Export business was quiet. Morocco is expected in the market shortly for 2,000 tons of cottonseed oil and 4,000 tons of soybean oil. Cash oil was firmer. Refined salad was higher at 13¼c. per pound, tankcars, New York, prompt delivery.

Crude cottonseed oil was firm. Old crop was 10¼c. bid and 10c. bid for first made September in the Valley, and 10c. August and 9¾c., September, Waco.

The Department of Agriculture, in its first cotton crop estimate based on August 1 conditions, forecast production at 14,471,000 bales, 87,000 bales less than last year's production of 14,551,000 bales. Indicated area for harvest this year is 15,531,000 acres, about 3 percent higher than 15,090,000 acres harvested last year.

Linseed—Withdrawals against contracts were in fair request, while new business was confined to fill-in needs. Raw oil was unchanged and steady at 13.20c. per pound, tankcars, f.o.b. Minneapolis, August-October delivery and 14.31c., tankcars, f.o.b. New York.

Peanut—Crude continued strong and market advanced fractionally to 16½c. per pound, tankcars, f.o.b. mills, for prompt shipment. Offers were light. Refined oil was raised to 19¾c., tankcars, New York basis.

The government crop report estimated peanut crop, August 1, at 1,626,070,000 pounds compared with 1959 production of 1,592,565,000 pounds and 10-year 1949-58 average of 1,591,648,000 pounds. Acreage was indicated at 1,398,000 acres against 1,453,000 last year and 10-year average of 1,695,000 acres. Yield per acre was placed at 1,163 pounds compared with 1,096 pounds last year and 10-year average of 951 pounds.

Soybean—Active demand for refiners account combined with limited supplies for prompt delivery further stiffened crude oil. Prices were lifted ½c. with sales made up to 9¾c. per pound, tankcars, Decatur, unrestricted for August delivery. September was held at 9⅝c. Refined salad was boosted to 11.80c. per pound, tankcars, New York basis.

The Department of Agriculture estimated the soybeans crop as of August 1 at 547,933,000 bushels compared with 587,895,000 production in 1959 and 10-year (1949-58) average of 361,270,000 bushels. Yield per acre was indicated at 23.2 bushels against 24 bushels last year and 10-year average of 21.3 bushels. Acreage totaled 23,596,000 compared with 22,428,000 in 1959 and 10-year average of 16,820,000 acres.

Tung—Lack of buying interest has unsettled the market. Offerings were freer and the market was nominal around 23c. to 23⅛c. per pound, tankcars, New York, prompt delivery, according to seller. Drums ranged from 24½c. to 25c. per pound, spot, as to quantity.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, August 12, follow:

	Sales	High	Low	Close
		Cents per Pound		
Sept.	328	11.96	11.56	11.86@11.88
Oct.	137	11.91	11.56	11.81S
Dec.	453	11.93	11.61	11.81S
March	153	12.12	11.73	11.92S
May	73	12.04	11.77	11.91@11.93
July	22	12.04	11.80	11.91@11.94

Total sales and switches, 1,167 contracts.

Miscellaneous

Cocoa Butter—This market was firmer. Stocks on spot ranged from 59c. to 64c. per pound, depending upon quantity.

Copra—Shipments were firmer with trading reported at $182.50 per ton, c.i.f. Pacific coast for prompt delivery.

Flaxseed—Crushers reduced cash flaxseed bids 5c. a bushel to $3.10, spot and to-arrive, basis Minneapolis. Spot market followed marked strength in futures, both influenced by lateness of the crop. Government report predicted 1960 crop at 28,419,000 bushels, compared with 1959 production of 22,709,000 bushels. Early seeded flax came through the July heat wave in better condition than had been expected. Later plantings were more vulnerable, extent of damage still in doubt.

Fats and Greases

Greases — Market remained steady. Trading was light and spotty. Offerings continued light. Choice white was firmer

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Oils, Fats and Waxes

and held at 7¼c. to 7⅜c. per pound, tankcars, delivered and yellow was unchanged at 5⅛c. to 5¼c., as to acid content.

Lard—Trading was reported spotty. Cash lard was maintained at 11.70c. per pound, drums, Chicago.

Tallow—Offerings were light for prompt delivery. Moderate trading was reported at unchanged quotations chiefly for domestic needs. Bleachable fancy was moved at 6c. per pound, tankcars, delivered. Prime was unchanged at 5¾c.; guaranteed fancy, 6¼c.; special, 5½c. and No. 1, 5⅛c. to 5¼c. Export interest was slow. Guaranteed fancy was held at 6½c. per pound, bulk, f.o.b. steamer and 7½c. for drums, f.a.s.

Cake and Meal

Cottonseed Meal—Interest in new crop meal improved, though trading was limited. Meal, 41 percent was quoted at $53 per ton, sacked, Memphis, August-September and $50, October-December. Old crop meal was nominal at $58 to $59 sacked, Memphis.

Linseed Meal—Trading was dull in this

—Continued on page 68

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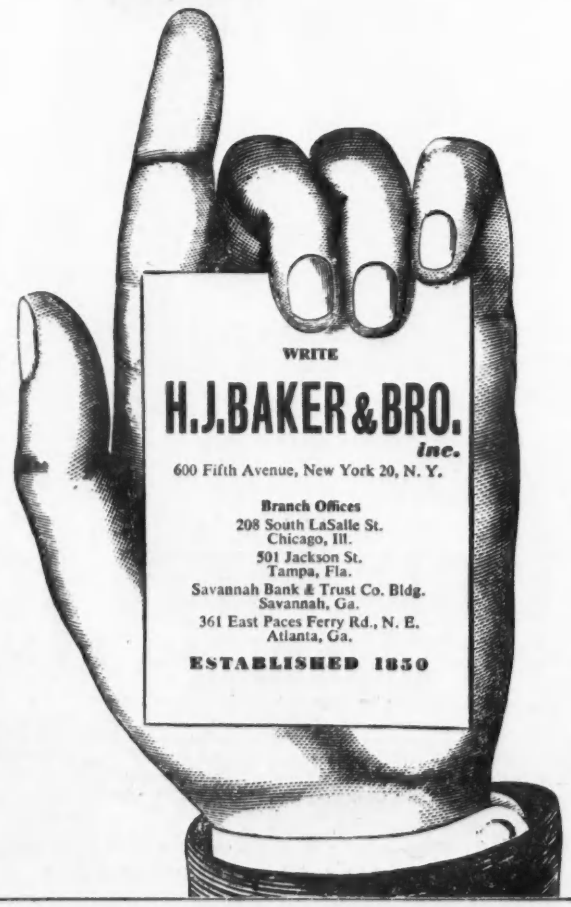

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Dow Chemical Company has issued a technical bulletin concerning use of **"Versene CA,"** which was recently cleared by the Food and Drug Administration for applications in the food industry. The clearance covered nonstandardized dressings, sauces and sandwich spreads and malt beverages. Tolerances are officially described in the August 4 issue of the Federal Register.

The company reports that **"Versene CA"** (calcium chelate of disodium ethylenediaminetetraacetic acid) was developed specifically for the food industry to be used in tying up trace metals which have an adverse effect on color, stability or clarity. The product is available in commercial quantities or sample quantities for laboratory investigation and is supplied as a white, flake material in dihydrate form.

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

Thickening Agents

Cellulose derivatives used as thickening and suspending agents include sodium carboxymethyl cellulose and hydroxyethyl cellulose. These derivatives produce odorless, colorless products whose stable character make them preferable to natural gums for many applications. However, as is the case with other polymers, storage under adverse conditions can lead to breakdown by hydrolysis or oxidation and subsequent loss of viscosity.

Although cellulose itself is not soluble in water, the introduction of a controlled number of sodium carboxymethyl groups to the cellulose molecule produces water soluble cellulose gums such as those manufactured by Hercules Powder Company. These gums are used in a wide variety of industries ranging from paper and paint to pharmaceutical and cosmetic. Hercules designates its technical grades of cellulose gums as **"CMC-CT,"** while the purified material is simply **"CMC."**

Thickening agents from natural vegetable sources have long been known. As with most natural products, properties may vary from batch to batch, but attractive price and efficiency in viscosity control have maintained a place for many of the natural water-soluble gums in the market. These materials are subject to biological attack and preservatives, such as sodium benzoate, are used as mold inhibitors. For non-food uses, formaldehyde or phenylmercuric compounds, among others, form effective preservative agents.

Probably the oldest and most widely known of the natural water-soluble products is acacia or arabic gum. Tragacanth, karaya and guar gums all find use as suspending or thickening agents for increasing viscosity in an aqueous solution. These materials act to keep insoluable solids in the aqueous phase and produce smooth bases for pharmaceutical and cosmetic creams.

Another source of natural products for thickening agents is the ocean, which yields a number of seaweed products. Most prominent among these are agar and the alginates Alginate solutions are not stable in acid solutions or in the presence of heavy metal ions or heat. However, fairly pure salts of alginic acid are made from kelp and these salts are used in many pharmaceutical and cosmetic preparations.

Starch products, such as Miles Chemical's **"Sumstar"** series may be used for viscosity control. Miles reports a process has been developed for production of dialdehyde starch which is controllable to the extent that material of any level of oxidation can be made. Three types are offered by the company; **"Sumstar"** over 90 percent oxidized, **"Sumstar-R,"** 75-80 percent oxidized, and **"Sumstar-J,"** 50 percent oxidized. The expression "percent oxidized" is taken to mean the number of original anhydroglucose units (changed to dialdehyde form) per 100 untis of the chain. The usual problems of insolubility in cold water and hydrolysis of the polymer are encountered. The latter difficulty is overcome by use of a buffered solution. Miles recommends that **"Sumstar"** not be heated in strongly alkaline aqueous solutions. (In general, periodate oxidized polysaccharides are characterized by instability in alkaline solution.) Miles indicates that the bisulfite adducts of **"Sumstar"** may be useful as substitutes for solutions of arabic gum, starch, dextrans and polyvinyl alcohol in resin emulsions. **"Sumstar-J,"** or lower aldehyde content products, may be the most useful thickening agents, the company reports.

Other possible applications include use as a tanning agent in the leather industry, to increase wet-strength in paper, and as a cellulose cross-linker to provide resistance to shrinking and creasing of textile fibers.

Nuodex Products Company manufactures three **"Nuvis"** thickeners for use by the paint industry. **"Nuvis 2"** and **"Nuvis HS"** are both proprietary powders used for viscosity control and prevention of sag and settling. The former is the standard item recommended for most uses, but at higher temperatures, **"Nuvis HS"** (heat stable) should be used with paints which become hot during production. **"Nuvis LB"** is a proprietary liquid, bodying agent used primarily to adjust viscosity after a batch of paint has been made up, although it too can be used as a regular constituent in a paint formula. **"Nuogel AO,"** aluminum octoate, is offered by the company along with a number of aluminum stearates. Here, too, main application is in the paint industry where aluminum soaps have long been used for viscosity control and prevention of settling.

Michigan Alkali Division of Wyandotte Chemicals Corporation makes the **"Carbose"** series of sodium carboxymethylcellulose products. These products find their main application in detergents, although drilling muds, paper and textile sizing and use in primers and sealers in the paint industry make up additional applications for technical material. Wyandotte markets only technical grades of sodium CMC in which active ingredient is about 65 percent. Food grade products, offered by such producers as Hercules Powder Company and E. I. duPont de Nemours & Co., are used in pharmaceutical ointments and tablets and in foods, primarily ice cream.

Wyandotte recommends the use of **"Carbose D"** for use in detergents. The product has been designed for use in household and commercial laundering. **"Carbose I"** is a general purpose agent used in many thickening, stabilizing and suspending applications. The material may also be used as an adhesive and binder. **"Carbose MX"** was designed specifically for use as an oil well drilling fluid additive, Wyandotte reports.

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2—Sharples #16, 304 S.S., 3 HP motor.

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1—500 gal. S.S. Mixing Tank with nickel coils.
1—4000 gal. Haveg Vert. Tank 8'x12'.
3—7500 gal. Rubber Lined Tanks 10'x13'.
1—1500 gal. Stainless Pressure Tank, 5'x10', 90#.
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
6—Stainless Heat Exchangers; 1220, 786, 536, 370, 315, 250 sq. ft.
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1—24" dia. x 35', 304 S.S. Bubble Cap Column.

FILTERS

1—#5 Sweetland Filter 304 S.S. 120 sq. ft.
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1—Baker Perkins 100 gal., jacketed, double arm, 30 HP.
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1—Baker Perkins 50 gal. jacketed, double arm.
1—Baker Perkins 9 gal. jacketed 304 S.S. double arm.
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1—3' dia. Simpson Intensive Mixer.
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1—100 gal. Baker Perkins #15-uumm, dispersion blades, cored, 100 HP. compression cover, jacketed, motorized tilt.
1—100 gal. J. H. Day, stainless, sigma, 10 HP.
4—75 gal. J. H. Day Imp., disp. blades.
1—20 gal. J. H. Day, #2 Cinc., sigma, jacket.

CENTRIFUGALS—FILTERS

37—Sharples #AS-16V contin. cent., inconel.
3—Sharples #C-27 Super-D-Hydrators, T316 SS.
3—Sharples size #C-20 super-d-hydrators, T316 SS.
1—Tolhurst 48" dia. susp. batch centrif., T304 SS, perf., 15 HP.
6—A.T. & M. 40" dia. susp. batch centrif., T304 SS, HP.
1—26" Tolhurst susp. basket centrifugal, steel.
1—12" A.T. & M. susp., T304 SS perf. basket.
1—Niagara #510-28 T316 SS filter, 510 sq. ft.
1—Niagara #53-36, T304 SS filter, 53 sq. ft.
2—Sperry P. & F. filter presses, ni-resist, 210 sq. ft.
1—Kelly #50 steel press. filter, 50 sq. ft.
2—Sweetland #7 steel press. filters, 117 sq. ft.
1—Oliver 5'3" dia. x 8' face rot. vac. filter, precoat, unused.
2—Oliver 5'3" x 3' rot. vac. filters, T316 SS, precoat, ASME.
1—American 4' dia. rotary vacuum disc filter, 3-disc.

PEBBLE MILLS

1—Patterson 6' x 10', porox lined, jacketed.
2—Patterson 8' x 10', batch mills, buhrstone lined.
2—Hardinge 7' x 36" conical pebble mills, buhrstone lined.
1—Allis Chalmers 6' x 18' burhstone lined.
1—Crosley 6'8" x 7', batch mill silex stone lined.
13—Abbe Eng. 6' x 8', batch mills buhrstone lined, 30 HP.
1—Porter 6' x 5', batch mill buhrstone lined.
1—Abbe 5' x 6', batch mill buhrstone lined.
2—Patterson 4'6" x 12' contin., buhrstone lined.

DRYERS—EVAPORATORS

1—Mojonnier 1550 sq. ft. T304 SS evap., triple effect, sanitary, with preheaters, finishing pan, etc.
1—Buflovak 700 sq. ft. forced circulation evaporator, single effect, T304 SS. Late model—like new!
1—Struthers-Wells 630 sq. ft. T316 SS calandria type evap.
1—Buflovak 5' x 30' rotary vac. dryer, T316 SS, ASME.
1—Buflovak 3' x 7' rotary vac. dryer, T306 SS, ASME.
1—Stokes #59A, 18" x 42" rotary vac. dryer.
1—Buflovak vacuum shelf dryer, 227 sq. ft., lithcote lined.
2—Buflovak vac. shelf dryers; 110, 98 sq. ft.
1—Devine vac. shelf dryer, 80 sq. ft.—Unused.
2—Pilot size 4' dia. spray dryers, T304 SS, elec. heating.
1—Buflovak 42" x 120" double drum dryer, ASME, 125# wp.
1—Buflovak 42" x 90" double drum dryer, w/conveyors, etc.
1—American vacuum 36" x 84" double drum dryer.
1—Buflovak 5' x 12' single drum vacuum dryer—Unused.
1—Link-Belt #604-18 Roto-Louvre dryer, 6'4" x 18' long.
1—Link-Belt #310-20 Roto-Louvre dryer, 3'10" dia. x 20' long.
1—Standard 3' x 23' rot. dryer, 1/4" welded shell, flights.

PERRY EQUIPMENT CORP.
1407 N. SIXTH ST., PHILA. 22, PA.
Phone: POplar 3-3505

LIQUIDATING

Ten Million Dollar Chemical Plant

NORTH JERSEY AREA

Type 316 Stainless Steel Equipment

7—Alloy Fabricators Type 316 SS pressure vessels, 4500 gals., complete with agitators and drives, 45 psi.
2—Alloy Fabricators Type 316 SS, 4500 gals., jacketed reactors, complete with agitators and drives.
2—Alloy Fabricators Type 316 SS, 1000 gals., jacketed kettles, ⅜" material throughout.
12—Whitlock Type 316 SS pressure vessels with coils, 270 gals.
3—Type 347 SS pressure vessels with coils, 300 gals.
3—Type 316 SS mixing tanks, 6000 gals., complete with agitators and drives.
8—Acme Type 347 SS settling tanks with cone bottoms, 1000 gals.
1—2600 gals., Type 316 SS vertical vacuum receiver.
3—Vertical Type 316 SS activated carbon absorbers, 5'4" dia. x 16'.
1—Struthers Wells Type 316 SS, 500 lbs. pressure vessel, 75 gals., ASME code, National Board.
2—Project Fabricators Type 316 SS vacuum receivers, 160 gals.
2—Pfaudler 500 gals., glass lined jacketed kettles.
1—Pfaudler 20 gals., glass lined vacuum receiver.
1—Haveg 500 gals., vacuum receiver.
2—Aluminum horiz. 5000 gals., storage tanks.
5—Pfaudler horiz. glass lined storage tanks, 5000 gals.
1—Pfaudler vertical glass lined storage tank, 5000 gals.
2—Rubber lined tanks, 2500 gals., working pressure 45 lbs.
4—Rubber lined horiz. storage tanks, 5000 gals., working pressure 45 lbs.
16—Rubber lined vertical storage tanks, 4500 gals., working pressure 45 lbs.
4—Patterson Kelley SS condensers, 500 sq. ft.
7—Stainless steel condensers from 50 to 300 sq. ft.
4—Stainless steel packed columns, 18" x 15'.
2—Shriver 18" x 18" SS plate and frame filter presses, 10 chambers.
5—Shriver 42" x 42" wood plate and frame filter presses, complete with hydraulic closing device, 30 chambers.
7—Buflovak Type 316 SS jacketed rotary vacuum dryers, 5' x 30', complete with 25 HP explosion proof motors and drives.
3—Type 316 SS Ter-Meer continuous type centrifuges 4' dia. bowls complete with motors.
3—Readco SS jacketed horiz. blenders, complete with explosion proof motors and drives.
3—Mikro #3TH SS pulverizers, complete with 40 HP explosion proof motors.
1—Mikro SS bantam pulverizer, Model CF, complete with 3/4 HP explosion proof motor.
3—Gruendler SS, lab size, pulverizers.
2—Nash, Model HS-6, Hastelloy B vacuum pumps, with 25 HP motors.
3—Nash, Model HS-6, Type 316 SS vacuum pumps, with 25 HP motors.
3—Nash, Model TS-12, vacuum pumps, with motors.
1—Stokes Type 316 SS, jacketed, rotary vacuum dryer, 2' x 3'.
14—Copper jacketed mixing kettles, 3500 gals. each.
14—Copper jacketed rotary vacuum dryers, 8' x 10'.
5—American Type 316 SS blowers, Model MD, size 27".
6—200 gals., Type 316 SS vacuum receivers.
1—Fuller Type 316 SS, airveying system.
1—Aldrich Type 316 SS hydraulic triplex pump, size 2-3/4"x4", 500 psi.
1—Quimby Type 316 SS twin screw pump with 10 HP variable speed drive.
2—Powell Type 316 SS 10" hydraulically operated flanged gate valves.
2—Tyler Type 38 tandem SS Hum-Mer screens, size 42" x 9'-8".
50—Stainless steel and aluminum hoppers, all sizes.
100—Stainless steel centrifugal pumps, all makes and sizes.
3—200 gals., Type 316 SS jacketed kettles.
12—Type 316 SS Cyclone separators, 5'-2" x 10'-8" overall.
500 Tons of Type 316 SS pipe, fittings and valves, ranging from 2" to 6".
500 Tons of structural steel.
12—125 HP vertical agitator drives with Philadelphia drive, output speed 15.
2—150 HP vertical agitator drives with Philadelphia drive, output speed 15.
16—40 HP horizontal drives.

Our 75th Year

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EST. 1886
UNION, NEW JERSEY **MUrdock 6-4900**

EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

1—General American 7' x 40' rotary dryer, ⅜" welded shell, complete.

1—Louisville steam tube dryer, 8' x 45'.

2—Louisville SS rotary dryers, 8' x 50'.

2—Stainless steel rotary dryers, 4' x 20' nd 6' x 50'.

1—Hersey SS rotary dryer, 18" x 12', complete.

1—Williams, "Comet" 4 roll mill, complete.

1—Mikro #1SH, SS pulverizer.

1—Mikro #4TH, SS pulverizer.

1—Sprout Waldron #501D pelleter, complete with 30 HP explosion proof motor.

1—Richmond Engr. Type 316, 40 cu. ft., double ribbon blender.

10—Robinson SS double ribbon blenders, 255 cu. ft.

1—Day double ribbon blender, 2000#.

2—Buflovak twin drum dryers, 42" x 120".

1—Banbury #1 chrome plated mixer, complete with 50 HP motor.

1—Baker Perkins double arm, jacketed, sigma blade mixer, size 16 TRM, 150 gal.

1—Baker Perkins double arm, jacketed, dispersion blade mixer, size UUEM, 150 gal., with 100 HP motor.

25—Davis Engr. SS heat exchangers, 104, 121, 139 and 168 sq. ft., NEW.

1—Downington Type 316 SS heat exchanger, 750 sq. ft.

1—Pfaudler, Series P, 20 gal. glass lined jacketed reactor with impeller type agitator.

1—Pfaudler, 1000 gal., glass lined open top storage tank.

1—Cleveland SS double cone blender, complete with motor and drive, 85 cu. ft. working capacity.

1—Glascote glass lined jacketed reactor with Glascote turbine type agitator and drive, 500 gal.

1—Shriver 36" x 36" cast iron filter press, 48 chambers.

1—Oliver SS pressure precoat filter, 5'3" x 8'.

1—Oliver SS rotary vacuum precoat filter, 3' x 4'.

1—Stokes #412F vacuum pump complete with motor.

8—Western States 40" Type 316 SS, suspended type centrifuges complete with perforate baskets, plows and 40 HP motors.

4—Tolhurst 40" rubber covered, center slung centrifuges, complete with perforate baskets and motors.

2—Sturtevant SS, #7 dustless type, rotary batch blenders, 70 cu. ft., NEW.

R. GELB & SONS, INC.
UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

BUFFALO 32" x 90" DOUBLE DRUM DRYER

DAY HY-R SPEED MILL 20 HP XP

CENTRIFUGALS—12" 30" 40" & 48".
CENTRIFUGES—Sharples #5 & 6 S.S.
DRYERS—Hersey 5' x 26' Rotary Stainless Buffalo 32" x 90" Double Drum Dryer Buffalo Vac. Drum Dryer 24" x 20". Despatch Ovens Elec. Heated. Devine 8 shelf Vac. Dryer 40" x 42". Hope S.S. Can Filler pints to gals.
FILLERS—Powder & Liquid. Also Labelers.
FILTERS—Vallez type 49, with 41 Stainless covered leaves. #2 Sweetland 12 Stainless covered leaves. Ertel 6" & 10" Disc type.
FILTER PRESSES—6" to 36" Iron & Wood.
KETTLES—Stainless Jack. 20 to 500 gals. Dopp 350 gal. Cast Iron Jack. Vacuum. Devine Impreg. Units 30" & 36" dia. Steel Alum & Copper 5 to 2,000 gals.
WILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000. Mikro Pulverizer #4, 2S1, 2TH, 1SH. Hammer Mills & Pulverizers 3 to 50 HP. Williams #3 & #2XX Hammer Mills. Rotary Cutters 1 HP & up. Spr. Weld. Stainless Spike Crusher. Pebble, Jar & Ball Mills. Lab to 6' x 8'. 3 Roll, 9" x 32", 12" x 30", 16" x 40". Lehmann 4 Roll W. C. 12" x 36" Steel
MIXERS—Baker Perkins 100 gal. Jack. R. P. 15 HP—Masticator Mixer. Day Imperial 75 & 150 gal. Change Can Pony Mixers 5, 15 & 40. Day Jumbo 700 gal. horiz. Mixer. Sprout-Waldron 10,000# horiz. Spiral Mixer. Blystone 3000# horiz. spiral Mixer. Day 1000# horiz. Dry ribbon Mixer. Dry Spiral Mixers 50 to 3000#. Lancaster 6' dia. 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM. Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson Rotex type.
SOAP MACHINERY—Toilet, Laundry, etc.
TABLET MACHINES—Stokes Rotary RD3, Colton 4½T & 2B single punch.
TANKS—Stainless, GI Lined, Steel.

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STerling 8-1944

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Homogenizer-Disperser: Tri-Homo #10, #4.
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Dryer: Bowen lab. spray, st. st.
Evaporator: Buflovak sgl. eff. st.st. 94 sq. ft.
Dryer: Porter 2 x 4' vac. drum, st. st.
Centrifugal: Tolhurst 26" rubber, 2-speed.
Filter: Sweetland #5 st. st. lined.
Filter: Eimco, drum 16" x 12".
Heat Exchangers: st. st. tubes, 400 sq. ft.
Dryer: Devine #7, 13 shelves 60" x 7'.
Centrifugal: Tolhurst 20" type 316 st. st.
Centrifugal: AT&M 60" st. st. perf.

Write us or call Seeley 8-1431
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2—F. J. Stokes "DDS-2" Rotary Tablet Machines, vari-drive.
2—Gruendler Aristocrate slow speed Hammer Mills, each with 75 h.p. motor, feeder, etc.
1—23 cu. ft. Stainless Steel Ribbon Blender.
1—#2 Sweetland Filter, 17 leaves, 2" centers.
1—Abbe #8 Steel Ball Mill, motor driven.
1—Kinney DVD 8810 Vacuum Pump, 110 c.f.m.
1—Colton #2B single punch Tablet Mach.
1—Lydon 3 truck Atmospheric Truck Dryer.
1—#3 Banbury Mixer with 75 h.p. motor.

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2708 CAROL ROAD UNION, N.J.
MUrdock 6-8883

"OUTSTANDING VALUES"

316 Stainless Steel High Pressure Reactors
2—655 gal. Vert. Autoclaves, 900# WP, 600# Jacket with Turbine Agitator.
1—728 gal. (same as above).
1—5600 gal. Horiz., 6 compart., 6 Agitators, 600# WP.
1—2760 gal. Horiz., 3 compart., 3 Agitators, 800# WP.

Wire or phone collect—GA 1-1380

ME MACHINERY AND EQUIPMENT CO.
123 Townsend St., San Francisco 7, Calif.

PULVERIZER—3 HP #00 Sturtevant—10HP 2TH Mikro—30 HP Raymond—50 HP 3TH Mikro (unused).

DUST COLLECTOR—Mikro Model 36-1-84—Sly 43"x77"x73½" H-459-D.

SCREENS—12"x72" S/S—20x84 Rotex—20x96 Rotex—3x5, 3x10 Tyler Hummer—30x68 Jeffrey.

MIXERS—1 c.f., 20 c.f. double cone—30 c.f. Patterson Kelly—12 c.f., 22 c.f. Ribbon—40 gal. S/S Pony—60 gal. Post—1 HP 1150 RPM Lightnin'.

FEEDERS—4¼"x24", 24"x72" Syntron S/S—Draver controlled rate, Hardinge Constant Weight.

AIR CLASSIFIERS—Gayco 30"—Sturtevant 36"—Gayco 5', all w/motor drives.

KETTLES—24x30 S/S 125 PSI, Jacket 75 PSI—S/S lined 150 gal. 40 PSI, Jacket 75 PSI.

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4—30" Sperry Filter Presses, 32 Chambers, NICKEL or NI-RESIST Plates.

2—250 Ton Swenson Acid Bath Evaporators, RUBBER-LINED, Complete.

2—Rietz Disintegrators, Model RD-18-P, 75HP.—3/60/440.

1—Whitlock #17 STAINLESS Heat Exchanger, Type S, Two Pass, "304" ⅝" tubes, 60# press., Steel Shell, Wgt. 1,700#.

8—Baker-Perkins Vissolvers, Size 2-G, 950 Gals., 30 HP Motor—Falk Reducer Drives.

1—Griscom-Russell STAINLESS Heat Exchanger, 1" x 18 ga. Tubes, type 304, 16" dia. tube Bundle, Wgt. 2,000# Steel Shell.

1—375 Sq. Ft. Patterson Kelly STAINLESS Heat Exchanger, 1953 built, Steel Shell, 2" Tubes, 300# Shell pressure, 75# tube press.

6—98, 134, 175 and 635 Sq. Ft. Ross Steel Heat Exchangers, ⅝" to 1-¼" tubes, 50, 65, and 100# pressures.

ALSO:
12 Viking Pumps, 6 Gearmotors, 15 Centrifugal Pumps, & Splashproof Motors, (7-½ HP). 6—10 HP Gearmotors, 4—3" x 3" Viking Pumps (only), 8 Nichol & Hi-Ni-Alloy Pumps & Motors & Numerous Other Items.

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Stokes Tablet Press—R

Kettle—20 Gal. Lead Lined.

1—1000 gal. type 316 Pfaudler not jacketed.

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Mitchell 2-7634

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SIFTERS: 40x120 Rotex; 3 deck Selectro 18x48.
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Oils, Fats and Waxes

—Continued from page 60

market, prices unchanged. Formula feed manufacturers held purchases to absolute requirements and crushers were not offering beyond August. Shipping directions were slower, reflecting lag in feed business. Extracted meal, 34 percent protein, was unchanged at $53 a ton, bulk, in carlots, f.o.b., Minneapolis, for prompt delivery. September meal was available from re-sellers at $54. Old process expeller meal was $58.50 for prompt, $59 last week of August and $61.50, September-December.

Soybean Meal—Pronounced weakness developed in this market, prices in most areas down $4 a ton. Eastern trunk line resisted sharpest declines, prices down $2.50. Weakness reflected extremely slow demand from formula feed manufacturers and pressure of surplus supplies. Production was slower but still more than could be absorbed. Meal, 44 percent protein, was lower at $47.50 a ton, unrestricted, bulk, Decatur, for prompt shipment.

Waxes, Vegetable

This market continued in the summer doldrums. Despite quiet business, prices remained unchanged and steady. Carnauba was well held on spot as a result of the high cost of replacements from Brazil. Offers for shipments were light and closely held at floor prices. No. 3 Ceara crude on spot ranged from 72c. to 73c. per pound, as to quantity and Parnahyba 1c. to 2c. more. Yellows were unchanged and steadier.

The supply situation of candelilla wax on spot continued to improve. Offerings were freer, but were maintained at steady prices. Crude ranged from 55c. to 56c. per pound, as to quantity and refined, 60c. to 62c., same basis.

African crude beeswax was firm and light stocks on spot were practically cleared from the market. Prices were nominal at 50c. to 52c. per pound, as to quantity and seller. Offers of other crude grades for shipment were limited and firmly held.

IMPORTS at United States Ports

New York

ACRYLONITRILE MONOMER—3 cs, Dow Chemical Co, Yokohama

AGAR—41 cs, T M Duche & Sons, Leixoes
140 bgs, Casablanca

ALGINATES—86 dms, Olympic Shipping Co, Hamburg

ALOE—103 cs, Meer Corp, Mussel Bay

ALUMINUM POWDER—21 cs, Chase Manhattan Bank, Hamburg
15 dms, Heidis Inc, Hamburg

ALUMINUM SULFATE—441 bgs, Industrial Chemical & Dye Co, Rotterdam

ANILINE DYES—49 dms, Geigy Chemical Corp, Havre
18 dms, Sandoz Inc, Havre
118 dms, Ciba Co, Rotterdam
17 dms, Carbic Hoechst Corp, Rotterdam
16 dms, Putnam Chemical Corp, Hamburg
57 dms, H Bruckmann & Lorbacher, Bremen
8 dms, Heemsoth Kerner, Liverpool
20 dms, L & R Organic Products Co, Rotterdam

ANNATTO SEED—455 bgs, A Beckmann, Ciudad Trujillo

ANTIMONY OXIDE—640 bgs, National Lead Co, Liverpool
100 bgs, Revelli Chemicals Inc, Rotterdam

ANTIMONY REGULUS—10 cks, Indussa Corp, Antwerp
438 cs, Rijeka

ANTIOXIDANT, RUBBER — 20 dms, Heemsoth Kerner, Liverpool

ARABIC GUM—1,258 bgs, Morningstar Paisley Inc, Port Sudan
127 bgs, Meer Corp, Port Sudan
254 bgs, Jacques Wolf & Co, Port Sudan
250 bgs, Lo Curto & Funk, Port Sudan
200 bgs, Henry Heide, Port Sudan
400 bgs, Port Sudan

ARROWROOT—3,000 bgs, Morningstar Paisley Inc, St Vincent

ARSENIC, METALLIC—38 dms, Belmont Smelting & Refining Works, Gothenburg
28 dms, Millmaster Chemical Corp, Gothenburg

ARSENIC, WHITE—970 dms, American Firstoline Corp, Marseille

ASCORBIC ACID—24 dms, Byron Chemical Co, Kobe

BARIUM SULFATE—30 cs, Marseille

BARYTES—660 bgs, Landers Segal Color Co, Bremen

BEESWAX—60 bgs, Koster Keunen, Casablanca
25 bgs, Machado & Co, Ciudad Trujillo
132 bgs, Santiago
52 bgs, Progreso
17 bgs, Ciudad Trujillo
45 bgs Puerto Plata

BELADONNA LEAVES—82 bls, Rijeka

BERGAMOT OIL—20 hf cs, Messina

BILE ACIDS—12 dms, Chase Manhattan Bank, Buenos Aires

BOIS DE ROSE OIL—5 dms, Northam Trading Co, Callao
5 dms, Lo Curto & Funk, Callao

BUTTONLAC—100 bgs, Wm Zinsser & Co, Calcutta
50 bgs, C H Timm, Calcutta

n-BUTYL MALONATE—5 dms, Geigy Chemical Corp, Liverpool

CALCIUM CARBONATE—360 bgs, J T Baker Chemical Co, London
1,200 bgs, N H Weitzner, Antwerp

CALCIUM CYCLAMATE—10 dms, Chase Manhattan Bank, Kobe
22 dms, Kobe

CAMPHOR POWDER—50 cs, Magnus Mabee & Reynard, Kobe
20 dms, Bremen

CANDELILLA WAX—313 bgs, M Argueso & Co, Tampico

CARAWAY SEED—200 bgs, Greenwich Seed Co, Rotterdam
125 bgs, M J Golombeck, Rotterdam
200 bgs, Levy & Levis Co, Rotterdam
400 bgs, Rotterdam

CARBON, DECOLORIZING—160 bgs, L A Salomon & Bro, Rotterdam

CARBON TETRACHLORIDE—65 dms, Genoa

CARNAUBA WAX—389 bgs, National City Bank, Tutoia
38 bgs, Bank of London & S A, Tutoia
188 bgs, Chase Manhattan Bank, Tutoia
250 bgs, Colonial Trust Co, Tutoia
338 bgs, Bankers Trust Co, Tutoia
32 bgs, J H Schroder, Tutoia
38 bgs, Bank of N Y, Tutoia
190 bgs, Frank B Ross, Fortaleza
250 bgs, Tutoia

CASEIN—250 bgs, F C Gerlach, Buenos Aires
500 bgs, Chemical Bank, Buenos Aires
499 bgs, Ponta Delgada
650 bgs, Rotterdam

CASHEW NUT SHELL LIQUID—222 tons, Minnesota Mining & Manufacturing Co, Cochin

CASSIA—533 bls, Rotterdam

CASTOR OIL—443 tons, Baker Castor Oil Co, Bombay
311 tons, Wallace & Tiernan, Bombay
301 tons, East Asiatic Co, Bombay
224 tons, Archer Daniels Midland Co, Bombay

CELERY SEED—17 bgs, Van Loan & Co, Marseille

CHESTNUT EXTRACT—2,200 bgs, Barkey Importing Co, Genoa

CINNAMON QUILLS—50 bls, C M Van Sillevoldt, Colombo
180 bls, Delano Corp of America, Colombo
110 bls, Curacao Trading Co, Colombo
100 bls, V A Cordovi, Colombo

CLAY—600 bgs, L A Salomon & Bro, Bremen

CLAY, BALL—1,071 bgs, United Clay Mines Corp, Avonmouth

COBALT OXIDE—208 cks, Antwerp

COBALT SULFATE—220 dms, Advance International Ltd, London

COCONUT OIL—325 tons, American Trust Co, Zamboanga

COCONUT SHELL CARBON—92 dms, Connor Engineering Corp, London
33 bgs, Connor Engineering Corp, London

COPAL GUM—64 bgs, O G Innes Corp, Manila
63 bgs, Wm H Scheel, Manila

CODLIVER OIL—50 dms, Arista Oil Products Corp, Bergen
153 Peder Devold Oil Co, Lexioes

CORIANDER OIL—8 cs, Kolon Trading Co, Antwerp
4 cs, Antwerp

CORIANDER SEED—300 bgs, M J Golombeck, Casablanca
300 bgs, Louis Furth, Casablanca

CORN STARCH—1,100 bgs, Impex Agricultural Co, Rijeka
672 bgs, Rotterdam

CORNMINT OIL—17 dms, Lo Curto & Funk, Santos

CREAM OF TARTAR—145 bgs, Nylos Trading Co, Genoa

CRESYLIC ACID—139 dms, Van Oppen & Co, Avonmouth

CUMIN SEED—70 bgs, L A Champon & Co, Larnaca

CUTTLEFISH BONE—100 cs, Mitsubishi Corp, Kobe

DEGRAS—10 dms, American Lanolin Corp, Genoa
50 dms, Gallard Schlesinger, Bremen
22 dms, Midwest Overseas Trading Co, Liverpool

DEXTRIN—486 bgs, Bestick Adhesives Inc, Rotterdam
275 bgs, Manufacturers Trust Co, Rotterdam

DIGITALIS LEAVES—3 bls, P H Petry, Puna

n-n-DIMETHYLUREA—68 dms, Philipp Bros Chemicals, Bremen

DYES, COALTAR—49 dms, H Bruckmann & Lorbacher, Hamburg
10 dms, Orlex Dyes & Chemical Corp, Hamburg
25 dms, Toms River Cincinnati Chemical Corp, Rotterdam

EARTH COLORS—1,220 bgs, Naftone Inc, Bremen
10 cks, Shepherd Chemical Co, Rotterdam
300 bgs, Naftone Inc, Rotterdam
691 bgs, Reichard Coulston, Larnaca
900 bgs, Rotterdam

FENNEL SEED—110 bgs, Buenos Aires

FENUGREEK SEED—301 bgs, Casablanca

FISHLIVER OIL—20 dms, Consumers Import Co, Yokohama
3 dms, Interocean Chemical & Minerals Corp, Yokohama
10 dms, Mitsubishi Corp, Yokohama
5 dms, Chase Manhattan Bank, Yokohama

FULLERS EARTH—460 bgs, L A Salomon & Bro, Avonmouth

GAMBAGE GUM—27 cs, Meer Corp, Singapore

GELATIN—225 bgs, Manufacturers Trust Co, Hamburg
40 bbls, Riches Nelson, Antwerp
351 bgs, Transatlantic Animal By-Products Corp, Antwerp
300 bgs, King Shipping Co, Rotterdam
80 bgs, Coignet Chemical Co, Marseille
73 dms, B Young, London
150 bgs, Manhattan Adhesives Corp, Hamburg
50 cks, Corbett & Co, Marseille

GERANIUM OIL—6 dms, J Manheimer, Algiers
4 dms, Chase Manhattan Bank, Algiers
20 dms, Ungerer & Co, Algiers
1 ck, A Verley & Co, Marseille

GLANDS, PITUITARY—21 cs, Ovimpex Inc, Wellington

GLUE, BONE—700 bgs, First National Boston, Hamburg

GLYCERINE—987 tons, International Packers Ltd, Buenos Aires
300 tons, Procter & Gamble Co, Manila

GOLD BRONZE POWDER—58 dms, Chase Manhattan, Bank, Hamburg

GOUDAMIDE-O—28 bgs, Aceto Chemical Co, Rotterdam

GRAPHITE—250 bgs, Superior Graphite Co, Colombo
1,000 bgs, Asbury Graphite Mills, Hong Kong
600 bgs, Asbury Graphite Mills, Bremen
2,000 bgs, Asbury Graphite Mills, Bergen

GUAR GUM—200 bgs, T M Duche & Sons, Genoa
200 bgs, Meer Corp, Genoa
1,500 bgs, J L Quesada, Valencia

GYPSUM—200 bgs, A Gusmer, London

GYPSUM, CRUDE—10,472 tons, U S Gypsum Co, Hantsport

HAARLEM OIL—10 cs, Menger Manufacturing Co, Rotterdam

HELITROPINE—3 dms, Hollander Trading Corp, Rotterdam

HEXACHLOROETHANE — 200 bgs, International Selling Corp, Marseille

HEXAMETHYLENEDIAMINE—8 dms, International Chemical Corp, Genoa

HOOF & HORNMEAL—659 bgs, Martin Baer & Co, Santos

IODINE, CRUDE—30 kgs, Chase Manhattan Bank, Yokohama

IRON BLUE—26 dms, Van Oppen & Co, Liverpool

IRON OXIDE—1,305 bgs, Landers Segal Color Co, Malaga
1,600 bgs, Smith Chemical & Color Co, Malaga
2,174 bgs, Reichard Coulston, Malaga

JALAP ROOT—5 bgs, F D Keller & Son, Vera Cruz

LACTOSE—20 cs, Industrial Chemical & Dye Co, Rotterdam

LAVANDIN OIL—25 dms, Bertrand Freres, Cannes

LEMON OIL—100 qu cs, National City Bank, Messina

LEMONGRASS OIL—26 dms, Lo Curto & Funk, Puerto Barrios

LICORICE ROOT—66 bls, Herbarium Inc, Piraeus

MACE—49 cs, Catz American Co, Singapore
46 bgs, Rotterdam

MAGNESITE—20 dms, Manufacturers Trust Co, Hamburg
20 dms, Frank Samuel & Co, Hamburg

MAGNESIUM CARBONATE—70 cs, Chas L Huisking & Co, Genoa

MARJORAM—20 bls, Van Loan & Co, Marseille

MENTHOL—25 cs, Magnus Mabee & Reynard, Keelung
260 cs, American Far Eastern Syndicate, Santos
50 cs, Lo Curto & Funk, Santos
50 cs, Fritzsche Bros, Santos
35 cs, Schwabach & Co, Santos

METHYLNAPHTHALENE—5 dms, Henley & Co, Rotterdam

MOLASSES—477 tons, W R Grace & Co, Salaverry

MONOCHLOROACETIC ACID—1,400 dms, International Selling Corp, Marseille

MONOSODIUM GLUTAMATE—200 dms, Ajinomoto Co, Yokohama

MUSTARD SEED—100 bgs, J W Beardsley, Messina

NAPHTHALENE—1,270 bgs, Antwerp

NAPHTHENIC ACID—136 dms, Imperial Oil Ltd, Barranquilla

OAKMOSS—170 bls, Givaudan Corp, Rijeka

OCOTEA CYMBARUM OIL—25 dms, American Metagraph Co, Itajai

OITICICA OIL—300 tons, Brazil Oiticica Inc, Fortaleza
250 tons, Irving Trust Co, Fortaleza

OLEORESIN PAPRIKA—46 cs, Alicante

OLIVE OIL—96 dms, J H Schroder, Malaga
342 dms, Hanover Bank, Malaga
171 dms, Uddo & Taormina, Malaga
50 dms, Manufacturers Trust Co, Seville

PAPAIN—102 cs, Bemo Shipping Co, Mombasa
50 cs, American Ferment Co, Mombasa
50 cs, Mombasa

PAPRIKA—300 bgs, M J Golombeck, Hamburg
200 bgs, M J Golombeck, Rijeka
50 bgs P H Petry, Alicante

PATCHOULI OIL—30 dms, Lo Curto & Funk, Penang

PEPPER, BLACK—80 bgs, A G Dunn, Cochin
70 bgs, Ludwig Mueller, Singapore
40 bgs, J H Elton, Singapore
40 bgs, Max Van Pels, Singapore
210 bgs, C Czarinkow, Singapore
80 bgs, George Uhe Co, Singapore
140 bgs, Otto Gerdau, Singapore
140 bgs, Atlanta Textile Corp, Singapore
140 bgs, V A Cordovi, Singapore
140 bgs, P H Petry, Singapore
140 bgs, Singapore
80 bgs, Colombo

PERCHLOROETHYLENE—204 dms, International Selling Corp, Marseille
28 tons, International Selling Corp, Marseille

PHOSPHORUS, RED—46 cs, Mitsui & Co, Yokohama

POLLACKLIVER OIL—200 dms, Peder Devold Oil Co, Yokohama
10 dms, Consumers Import Co, Yokohama
50 dms, Mitsubishi Corp, Yokohama
100 dms, F B Wilson Co, Yokohama

POLYVINYL ALCOHOL—1,477 bgs, Maurbeni Iida Co, Kobe

POLYVINYL CHLORIDE RESIN—2,860 bgs, Maurbeni Iida Co, Kobe

POPPYSEED—100 bgs, Biddle Purchasing Co, Rotterdam
150 bgs, Vande Vries Trading Co, Rotterdam
112 bgs, Istanbul

POTASSIUM FERROCYANIDE—500 bgs, Haras Co, Rotterdam

PYRETHRUM EXTRACT—10 dms, Dar es Salaam

PYRETHRUM FLOWERS—110 bls, P H Petry, Puna

PYRITES—179 cks, American Metal Climax, Leixoes

QUEBRACHO EXTRACT—5,667 bgs, Barkey Importing Co, Buenos Aires
4,162 bgs, American Tanners Ltd, Buenos Aires
2,225 bgs, Tanimex Corp, Buenos Aires
400 bgs, International Products Corp, Buenos Aires

QUINIDINE SULFATE—32 dms, Lo Curto & Funk, Hamburg
10 dms, Gyma Lab, Rotterdam

QUINOLINE—20 dms, B L Lemke & Co, Rotterdam

RAUWOLFIA SERPENTINA ROOT—166 bgs, Meer Corp, Bangkok

RODENTICIDES—10 dms, Gallard Schlesinger, Marseille

R-SALT—16 bbls, D C Andrews, Antwerp

SAGE LEAVES—600 bls, Dubrovnik
575 bls, Split

SAGE OIL—2 bbls, Wm E Martin & Son, Split

SAGO FLOUR—231 bgs, Morningstar Paisley Inc, Singapore

SANDALWOOD OIL—5 cs, Fritzsche Bros, Cochin

SAVORY LEAVES—8 bls, Van Loan & Co, Marseille

SEEDLAC—500 bgs, C H Timm, Calcutta
250 bgs, Mantrose Corp, Bangkok

SENNA PODS—48 bls, Meer Corp, Port Sudan

SESAME OIL—100 dms, Pacific Vegetable Oil Corp, Yokohama

SESAME SEED—455 bgs, A Sahdi & Co, Puerto Barrios

SESAME SEED, HULLED—500 bgs, Louis Furth, Corinto
900 bgs, Nieman Bros, Corinto
200 bgs, C M Van Sillevoldt, Corinto
200 bgs, Levy & Levis Co, Corinto
150 bgs, Ideal Trading Co, Corinto
150 bgs, M J Golombeck, San Juan del Sur
150 bgs, R J Spitz, San Juan del Sur

SIENNA, BURNT—150 bgs, C B Chrystal Co, Larnaca

SODIUM AMIDE—3 dms, Hamburg

SODIUM CYANIDE—300 dms, Chemical Manufacturing Co, Liverpool

SODIUM FERROCYANIDE—2 dms, Fischer Scientific Co, Bremen

SODIUM SILICO FLUORIDE—450 bgs, Copenhagen

SPEARMINT LEAVES—70 cs, Alexandria

SPERM OIL—300 tons, W G Smith, Sandefjord

SULFUR, CRUDE—10,302 tons, Dixon Chemical & Research Inc, Coatzcoalcos

TALC—5,885 bgs, Charles Mathieu, Genoa

TALHA GUM—50 bgs, Stein Hall & Co, Port Sudan

TAPIOCA FLOUR—3,464 bgs, Stein Hall & Co, Kohsichang
1,450 bgs, Morningstar Paisley Inc, Kohsichang
1,611 bgs, Geismar & Co, Bangkok
784 bgs, Manhattan Adhesives Corp, Bangkok

TARTARIC ACID—100 dms, Frank Samuel & Co, Marseille

THEOBROMINE—11 dms, Rotterdam

TITANIUM DIOXIDE—200 bgs, Titanium Pigment Corp, Bremen

TITANIUM DIOXIDE, ANATASE—2,205 bgs, Maruberi Iida Co, Yokohama

TONKA BEANS—36 cks, Machado & Co, Port of Spain

TRICHLOROETHYLENE—1,200 dms, International Selling Corp, Marseille
100 dms, Leghorn

TUNG OIL—499 tons, Pacific Vegetable Oil Corp, Buenos Aires
201 tons, Buenos Aires

UREA—441 bgs, D Hauser, Kobe

VANILLA BEANS—150 cs, Pacific Triangle Co, Samarang
100 cs, Marseille

WATTLE EXTRACT—1,054 bgs, Elkan River Plate Corp, Durban

ZINC CYANIDE—50 dms, Chemical Manufacturing Co, Liverpool

ZINC OXIDE—1,323 bgs, Smith Chemical & Color Co, Havre
200 bgs, D Young, Liverpool

Los Angeles

ARABIC GUM—300 bgs, Port Sudan

CARAWAY SEED—100 bgs, B C Ireland, Amsterdam

COPRA—500 tons, Wells Fargo Bank, Cebu

MOLASSES—2,435 tons, S Western Sugar & Molasses Co, Hinigaran

MONOSODIUM GLUTAMATE—150 cs, Ajinomoto Co, Yokohama

PEPPER, BLACK—70 bgs, Singapore

SEEDLAC—100 bgs, Calcutta

SENNA LEAVES—15 bls, Hathaway Allied Products, Kobe

TAPIOCA FLOUR—1,792 bgs, Stein Hall & Co, Kohsichang

Philadelphia

ASBESTOS FIBER—4,320 bgs, Keasby & Mattison, Lourenco Marques

CHESTNUT EXTRACT—1,000 bgs, Tac Tannins & Chemicals Inc, Marseille

GYPSUM, CRUDE—6,287 tons, U S Gypsum Co, Hantsport

MENTHOL—100 cs, Bankers Trust Co, Santos

MOLASSES—549,973 gals, Nuevitas
1,132,825 gals, Matanzas
479,785 gals, Preston
7,108 tons, Antilla
1,619,055 gals, Jucaro
623,583 gals, Cienfuegos

PYROPHYLLITE—3,003 tons, American Eucaustic Tiling Co, Long Pond

QUEBRACHO EXTRACT—1,970 bgs, International Products Corp, Buenos Aires
2,037 bgs, First National Boston, Buenos Aires
2,935 bgs, Tanimex Corp, Buenos Aires

TAPIOCA FLOUR—3,000 bgs, Brown Bros, Itajai

WATTLE EXTRACT—400 bgs, Barkey Importing Co, Dar es Salaam

San Francisco

AMMONIUM CHLORIDE—200 bgs, C M C Chemicals, Liverpool

BONEMEAL—664 tons, Stauffer Chemical Co, Buenos Aires

COCONUT OIL—300 tons, Procter & Gamble Co, Manila

COPRA CAKE—2,000 bgs, Berger & Plate, Cebu

DEXTRIN—400 bgs, Morningstar Paisley Inc, Amsterdam
80 bgs, Stein Hall & Co, Amsterdam

DICALCIUM PHOSFATE—1,102 bgs, Antwerp

GELATIN—40 bbls, Coignet Chemical Co, Antwerp
20 cs, Coignet Chemical Co, Antwerp

GRAPHITE—100 bgs, Pacific Graphite Co, Hong Kong

LIME CHLORIDE—25 dms, P W Bellingall, Rotterdam

PEPPER, BLACK—245 bgs, California Commodities Corp, Singapore
700 bgs, Singapore

POLYVINYL ALCOHOL—485 bgs, Maurbeni Iida Co, Kobe

QUEBRACHO EXTRACT—1,26 bgs, Barkey Importing Co, Buenos Aires

RUTILE SAND—535 bgs, Mattoon & Co, Newcastle

SODIUM BICARBONATE—100 bgs, C M C Chemicals, Liverpool

TUNG OIL—142 tons, Bunge Corp, Buenos Aires

UREA—2,500 bgs, Atkins Kroll & Co, Rotterdam

ZIRCON SAND—1,005 bgs, Mattoon & Co, Newcastle

Coatings Materials

—*Continued from page 57*

was offered at 19 cents without evoking much interest. So far as could be determined, consumers are carrying quite adequate inventories.

Glue—The Bureau of Census reported animal glue production in June at 8,960,000 pounds, as compared with 9,182,000 pounds in May, and 8,099,000 pounds in June of last year. Of the total June output, some 4,608,000 pounds were of various grades of hide glue, and some 4,342,000 pounds were of bone glue. Of the bone glue output 2,912,000 pounds were green bone glue and 873,000 pounds were of extracted bone glue.

Total glue stocks at the end of June amounted to 36,875,000 pounds as against 35,783,000 pounds at the end of May, and some 31,786,000 pounds at the end of June in 1959.

Naval Stores

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Aug. 5	Mon. Aug. 8	Tues. Aug. 9	Wed. Aug. 10	Thurs. Aug. 11
Drums—					
K	...		$14.75	...	...
M	...	$14.50	...	...	...
N	...	14.70	...	...	...
WW	...	...	14.71	...	...
Bags—					

Tankcars (for week ended August 12)—
Sales, USDA
New York
(Per 100 lbs., c.l., Friday)
WW, $17.50; WG, $17.35; N, $17.25; K-M, $17.00

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	...	...	...	.45	...
Sales	...	...	...	8,000	...

FDA Cracks Big Whip

—*Continued from page 3*

it "makes everything baked less fattening" because the calories have been "whipped out."

FDA seized the product on adulteration charges because the gas increased the bulk and reduced the total weight and on misbranding charges because, the agency said, there was no reduction in the number of calories per gram or ounce of the product.

The labels also contained statements that there were 3 cents off on the smaller sizes and 5 cents off on the larger size which, FDA said, also constituted misbranding, since the net content did not amount to what the consumer would expect to receive in a one-pound or three-pound can.

Commenting on the seizure of its product, Lever pointed out that the FDA action "does not raise any question as to the wholesomeness, performance or purity of its product, now 'Light Spry.'

"The technical charge of adulteration, as well as the other charges, relate only to the labeling and the packaging of the product and its nitrogen content."

Noting that nitrogen is used in all shortening, in many margarines and in whipped butter in varying amounts and is not listed as an ingredient in any of these products, the company contended that the charge that the increased nitrogen content in its product constitutes a technical adulteration "is without any foundation."

Flavorings-27 of Them

—*Continued from page 7*

hyde, aldehyde C-10); diacetyl (2,3-butandeione); ethyl acetate; ethyl butyrate; 3-methyl-3-phenyl glycedic acid ethyl ester (ethyl-methyl-phenyl glycidate, so-called strawberry aldeyhyde, C-16 aldehyde); ethyl vanillin; eugenol geraniol, and 3,7-dimethyl-2,6 and 3,6-octadien-1-ol).

Also, geranyl acetate (geraniol acetate); glycerol (glyceril) tributyrate (tributyrin, butyrin); limonene (D-, l-, and dl); linalool linalol, 3,7-dimethyl-1,6-octadien-3-ol); linayl acetate (bergamol); l-malic acid; methyl anthranilate)-2h-aminobenzoate); piperonal (3,4-methylenedioxy-benzaldehyde, heliotropin), and vanillin.

YOUR CONTACT WITH THE WORLD'S MARKETS
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ESTABLISHED 1918

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PARADICHLOROBENZENE

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Propylene Glycol, Ind. and U. S. P. • Hexylene Glycol • Dipropylene Glycol

GLYCOLS
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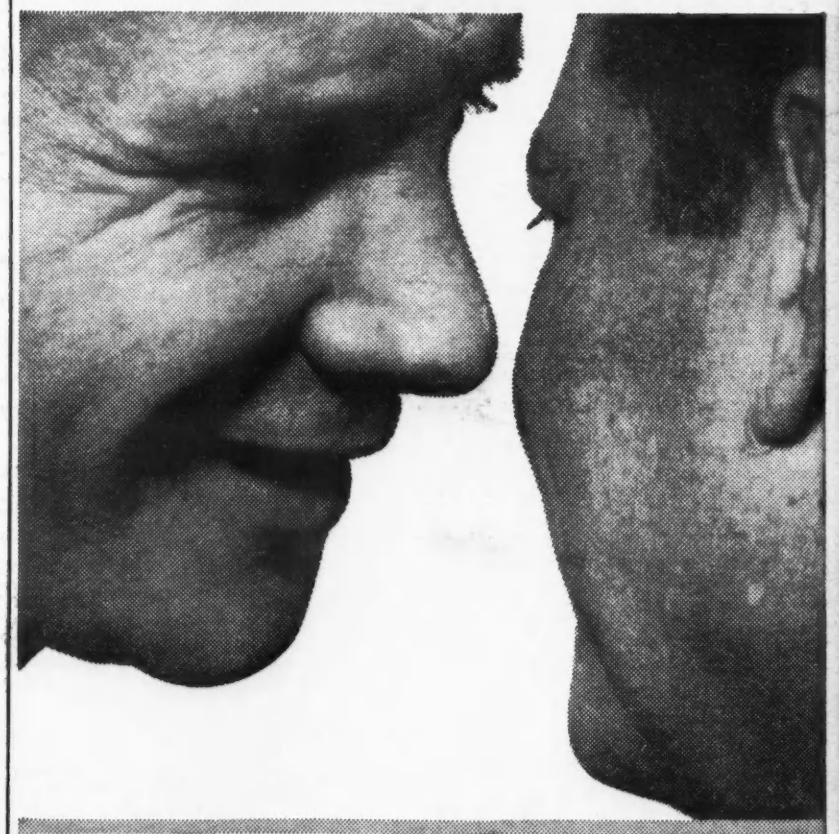

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